
This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

GoogleTM books

<https://books.google.com>



ETNOLOGISKA STUDIER

30

LITERATURE AMONG THE CUNA INDIANS

BY

FRITZ W. KRAMER



THE PENNSYLVANIA STATE
UNIVERSITY LIBRARIES

PENNSYLVANIA STATE
LIBRARIES

THE PENNSYLVANIA STATE
UNIVERSITY LIBRARY

2. fisker
musset

LITERATURE AMONG THE CUNA INDIANS

BY

FRITZ W. KRAMER

GÖTEBORG

1970

Copyright 1970
by
Göteborgs Etnografiska Museum

This book is printed with grants-in-aid
from Statens Humanistiska Forskningsråd

Printed in Sweden

GÖTEBORG 1970
ELANDERS BOKTRYCKERI AKTIEBOLAG

UTGIVARENS FÖRORD

Publikationsserien *Etnologiska Studier* från Göteborgs Etnografiska Museum började utgivas 1935 efter ett initiativ av dåvarande museichefen fil. dr Walter Kaudern. Dubbelvolymen 12–13 utgavs posthumt 1942, då grundaren, som hela tiden även personligen finansierade serien, hade avlidit tidigare under året. Då fil. dr K. G. Izikowitz från 1944 efterträdde Walter Kaudern som chef för museet till 1967 fortsatte han utgivandet i dess namn av serien under oförändrad titel. Under åren 1947–1967 har volymerna 14–29 periodiskt kunnat utgivas beroende på om tryckningsmedel kunnat erhållas och lämpliga, i regel monografiska, manuskript förelegat huvudsakligast från museets egen vetenskapliga personal, enskilt eller i samarbete med andra intresserade forskare. En komplett förteckning över innehållet i *Etnologiska Studier* 1–30 bifogas denna volym.

Volym 30 av *Etnologiska Studier* blir då den presenteras 1970 genom det jämna publikationsnumret på ett sätt en jubileumsbok. Det må därför tillåtas nuvarande utgivaren att med tanke på volymens innehåll nämna, att det under årens lopp kommit att publiceras ej mindre än tolv studier om cunaindianernas kultur och språk samt fem arbeten av samma typ om deras grannar i söder, chocóindianerna. Det har därför syntts ganska naturligt att även denna volym fått ägnas åt cunastammen. Ett gynnsamt tillfälle har också erbjudit sig genom att tyske etnolingvisten Dr. Fritz Kramer vid *Doktoranden-Kolleg der Universität Heidelberg* kunnat intresseras för att utgiva en i Tyskland gjord översättning till engelska av hans doktorsavhandling *Die Literatur bei den Kuna-Indianern* med underrubriken *Zur Bedeutung und Entwicklung kultureller Strukturen*. Författaren har också till en mycket betydande del byggt denna strukturella studie på en språklig stil- och innehållsanalys av det viktiga och rika dokumentmaterial från cunaindianerna i Panama och Colombia, som vi har i Göteborgs Etnografiska Museum. Han studerade där för ändamålet i april 1965 och under augusti-oktober 1966, båda gångerna i intimt samarbete med utgivaren.

Författaren har i sitt eget förord framfört sitt tack och sina synpunkter på materialet. Det är på museets och seriens vägnar angeläget att nu få tacka författaren för det samarbete som möjliggjort publiceringen av hans

arbete. Med särskild glädje framföres också ett värdsamt tack till *Carl-Bertel Nathhorsts Vetenskapliga Stiftelse* och till *Statens Humanistiska Forskningsråd*. Stiftelsen har genom ett anslag möjliggjort översättningen av det tyska manuskriptet samt även medgivit att ett härvid inbesparat mindre belopp fått användas till upplagekostnaden. Forskningsrådet har genom ett avgörande anslag svarat för denna i övrigt och därvid visat förståelse för en vetenskaplig publiceringslinje som sedan länge följts för serien *Etnologiska Studier*.

Göteborgs Etnografiska Museum i maj 1970.

S. Henry Wassén
Museichef

EDITOR'S PREFACE

Etnologiska Studier, the series published by the Gothenburg Ethnographic Museum, was started in 1935 on the initiative of Dr. Walter Kaudern, then Director of the Museum. The volume containing Nos. 12–13, which appeared in 1942, was the last to be published by Dr. Kaudern, who also financed the publication until his death in 1942. When in 1944 Dr. K. G. Izikowitz succeeded Walter Kaudern as Director of the Museum, he continued to publish the series under its old name on behalf of the Museum. During the period 1947–1967 the publication of vols. 14–29 was made possible through grants toward the printing of suitable manuscripts, usually monographs. A complete table of the contents of *Etnologiska Studier* 1–30 is included in the present volume.

When *Etnologiska Studier* appears in 1970 it will have an even number, vol. 30, and this can be said to be a special anniversary. The present editor takes this opportunity to say that over the years no less than twelve studies on the Cuna Indians, their culture, language etc. have been published. In addition there have been five similar works dealing with their southern neighbours, the Chocó Indians. As a result it seems natural that this volume should also be dedicated to a subject bearing on the Cuna tribe. We have been fortunate enough to secure the co-operation of the German ethnolinguist Dr. Fritz W. Kramer. Published in this volume is an English translation of his German doctoral thesis *Die Literatur bei den Kuna-Indianern*,

sub-titled *Zur Bedeutung und Entwicklung kultureller Strukturen*. This structural study is mainly based on a linguistic analysis of the style and contents of the important documents concerning the Cuna Indians of Panama and Colombia. These documents are in the collections of the Gothenburg Ethnographic Museum, where the author studied his subject in April 1965 and during August-October 1966, on both occasions in close collaboration with the present writer. In his preface Dr. Kramer gives his views on the material and other aspects of the subject.

On behalf of the Gothenburg Ethnographic Museum, I should like to acknowledge this institution's indebtedness to *Carl-Bertel Nathhorsts Vetenskapliga Stiftelse* of Stockholm, whose contribution of a grant made possible the translation of the German manuscript and a small portion of the printing cost. The Museum is also indebted to the *Statens Humanistiska Forskningsråd*, which gave a major grant toward the printing of this work in the Series of the Museum.

The present editor of the Series also wishes to thank the author sincerely for his co-operation, which made it possible to publish this volume.

Gothenburg, May, 1970

S. Henry Wassén, Director
The Gothenburg Ethnographic Museum

PREFACE

In the extent to which the European and N. American civilisation's achievements have expanded, social anthropology observes the process of destruction of the pre-bourgeois societies, in order to devote itself largely to studying the remaining fragments. It is structural anthropology that has, for our time, opposed the myth of the "senselessness" of "primitive cultures", and in this respect the study submitted here is bound to it. At the same time, however, structural anthropology has created a myth of petrified structures, hiding that very process of destruction under a melancholy veil resulting from dehistorisation. In contrast, anthropologists like Erland Nordenskiöld have publicly denounced the destruction of the Amerindian societies. This is connected with their understanding of the historicalness of the Indian societies, with their research of material which is guided by their historic interest and with their personal commitment to the interests of the Indians. The thesis submitted here is therefore bound to Erland Nordenskiöld and his colleagues and successors, in particular Henry Wassén and Nils Holmer, and this in a double sense: firstly, it could continue an anthropological tradition—which I hope will become visible despite the break with this tradition which does, admittedly, exist; and secondly, it was only possible for me to make a detailed study of a tribal people because Nordenskiöld, Wassén and Holmer had not only collected an extraordinarily large amount of material on the Cuna, but the collection and study of the material never lost sight of the historical perspective, of the linguistic meticulousness, or of the endeavour to cover all aspects of social and cultural life.

My studies of the Cuna language, writing, literature and society which form the basis of the thesis submitted here began in 1964 with detailed discussions, for which I should like, at this point, to express my thanks to Karl A. Nowotny. I am particularly indebted to him for a certain attitude to the material, and it is my hope that, in spite of the interest in structural analysis contained in this thesis, the material has not been pushed aside. My deepest gratitude goes to the Ethnographical Museum in Göteborg whose unique and precious collections of Cuna manuscripts I was able to

study thanks to a DAAD grant, and to Henry Wassén whose knowledgeable advice and practical assistance were most important to me.

I also thank Professor Mühlmann, Professor Müller and the students and colleagues at the Institute for Sociology and Ethnology of the Heidelberg University for allowing me to carry on discussions with them about my studies.

The thesis submitted here was accepted as a dissertation by the Philosophical Faculty of Heidelberg University in 1969 under the title "Die Literatur bei den Kuna Indianern". It was translated by J. Ellerbrock and Anita Lohnberg.

Heidelberg, January 1970.

F. K.

INTRODUCTION

The Cuna are an Indian tribe of some 30,000 individuals, in the North east of Panama. Their territory covers the area from the Punta San Blas to the eastern side of the Gulf of Urabá. Today the large part of the Cuna live on the off-shore coral islands of the San Blas archipelago. Of the approximately 360 islands some 45 are populated today. The population of one isle (and thus of a village) ranges from one family to 2700 inhabitants. In addition there are seven villages in the coastal area. Apart from this section of the Cuna, which in ethnography is usually called "San Blas", there are two others in the almost inaccessible interior of the Isthmus, those on the upper Rio Bayano (probably eight villages), and the hitherto almost unknown Cuna on the upper rio Chucunaque. Finally there are the following villages: Paya (on the Rio Paya), Rio Caimán (on the eastern side of the Gulf of Urabá), and Arquia (in the Atrato valley) (cf. Herrmann 1964: 277; Stout 1947 a: 13; Marshall 1950: 37, Wassén 1949: 67-76; de Smidt 1948: 41).

In spite of their long contacts with whites and negroes the Cuna have not mixed with other races. The main anthropological differences between the Cuna and their Indian neighbours are their surprisingly small stature (average height of men 149.9 cm; of women 140.4 cm (R. Harris 1926 a), and an extraordinarily high percentage of albinos (around 0.5% (Stout 1947a: 15; Keeler 1964)). Hrdlička (1926) holds that the Cuna are anthropologically related to Maya and Yunga.

The older hypothesis, first set up by Lehmann (1920: 123), that the language of the Cuna belongs to the Chibcha-group must be revised after the investigation of Holmer (1946, 1947), although it is true that like many other Colombian and Central American languages (Kagaba, Bribri, Rama, and others) it contains a large number of loan-words from Chibcha, and probably it belongs to a type that is extinct in all other respects (Holmer 1947: 217). The various Cuna dialects differ only insignificantly. The variation is confined almost entirely to the phonological component, grammar and lexicon are hardly affected by it (Holmer 1951: 77-82). — The language is comparatively well investigated (Cullen 1851; de Puydt 1868; Berendt

1874; Lull 1874; Pinart 1890; Prince 1912, 1913; Gasso 1908; Berengueras 1934; Puig 1944, 1946; Alba 1950; Holmer 1946, 1947, 1951, 1952 a, 1953). Thus the foundations are laid for an investigation of the literature.

Little is known on the origin and the previous history of the Cuna. At the beginning of the 16th century Cuna stayed on the Rio León and on the lower Atrato (Romoli 1953: 425). After the Cueva, who lived at that time in the province of Darién (the present settlement-area of the Cuna) and with whom the Cuna are incorrectly identified in almost the entire ethnographic literature, had been considerably decimated by diseases and the Spanish invasion in the course of the 16th century, the Cuna advanced westward and gradually occupied the territory of the Cueva, who finally died out completely. Thereby the Cuna had occupied a geographic position, which—just because it was very attractive and much contested as the narrowest juncture between the Atlantic and the Pacific—made it possible for them up to the present day to maintain an unusual autonomy by means of a wise policy of alliances. This and the strong sense of tradition enabled them, regardless of all cultural contacts, to unfold their culture almost uninfluenced. On the other hand they are unusually easy to reach, so that during the last 300 years travellers, missionaries, colonial officers, and ethnologists continuously and in large number could record ethnographic data. These have in the meantime been systematized in four monographs (Nordenskiöld, ed. Wassén 1938; Stout 1947 a; Puig 1948; Marshall 1950). In this way also large numbers of ethnographica reached the museums, including also collections of altogether more than 500 literary texts in Cuna writing or Latin characters, or as sound recordings. — This numerous source material, which offers the ethnologist an unusually favourable situation, makes the literature of the Cuna an ideal object for the study of the literature of a tribal people.

The assumption that the tribal peoples are “writingless cultures” is one of the most persistent errors of ethnology. This error goes so far that the known cases are dismissed under cover names like “mere picture writing” and the like, or are simply declared “acculturated”. In reality there is hardly any larger area (perhaps except in Africa) that is really “writingless”, and even today new writings are permanently discovered—significantly enough, among ethnic groups that have been known for a long time (Iban, Leppo Tau Kenyah, Motilonés, etc.). He who seeks the “primitive” will hardly find something else.

“Literature” is only a rough translation of the word “ikala”. The original meaning of “ikala” is “where one puts the foot”, i.e. “way” (Holmer 1947:

120); in view of the traffic situation in the jungle this means at the same time "river". The meanings "journey", "life", "events", "adventure" are subsequent derivatives from this. Many of the poetic texts narrate the story of a journey, a life, an adventure; therefore the texts are called "ikala". Life means "journey", "adventure", "to go a way". In most cases the ways lead into an imaginary world beyond the horizons of the known, into an external world. A Cuna narration starts with the familiar, the harmonic; then the harmony is disturbed, someone must embark on a journey; he follows a way into the unknown, the unfamiliar, and tries to find the cause of the disturbance and to eliminate it. On his return from the external world he brings the solution with him: the calm is restored. Therefore "ikala" also means "justice". For the listener the narration is also a lesson, it is intended to show him the right "way"; consequently, "ikala" also means "lesson", "instruction" (Gasso 1912: 88). All these are paraphrases for one single concept; actually they are by no means of a purely etymological value; "ikala", the way, is a symbol. One might almost say: "ikala" does not mean the literature, but symbolizes it.

CHAPTER I: THE STRUCTURE OF CUNA POETRY

1. ON A THEORY OF A POETRY

Grammar, Discourse, Poetry

The set of poetic texts in a given language is a subset of the set of linguistic discourses in this language. Both are (potentially) infinite sets: one cannot conceive a discourse of maximal length in a given language. By adding an element any discourse can be lengthened. — This implies that

— a poetic text must be understood as a special case of a linguistic discourse

— a description of all characteristics that all poetic texts have in common must be a description of characteristics of a system generating (or capable of generating) the poetic texts, for only a system makes it possible to generate an infinite set of chains (with definite structures) from a (necessarily) finite set of rules.

The system generating the poetic texts thus consists of two subsystems, one of which, the grammar, determines the general properties of discourses while the other, the theory of a poetry, which will be called *p*-theory in the following, determines the specific properties of poetic texts (discourses).

The grammar, being general, is the primary, the theory of a poetry, being specific, the secondary system. Linguistic discourses have a primary, poetic discourses a secondary structure.

The grammar generates linguistic discourses, the *p*-theory selects from them those structured in a certain way and transforms them according to certain (general) rules. The *p*-theory thus consists of two parts, a selective mechanism and a transformative mechanism. In addition, the *p*-theory consists of components corresponding to those of the grammar. — The grammar, as understood in this context, consists of a system for generating sentences (sentence grammar) and a system for arranging sentences into discourse (discourse grammar). The sentence grammar consists of three components, the phonological, the syntactic and the semantic, which are brought into different relations in the different linguistic theories. For example, in transformation theory the syntactic component generates the sentence structures, to which on the one hand the phonological component

gives a sound structure and on the other hand the semantic component a semantic structure. Accordingly the *p*-theory also consists of three components (each as selective and as transformative mechanism): a phonological component governing the sound structure (e.g. of the verse), a syntactic component allowing only sentences with a definite structure and transforming them if necessary, and a semantic component lending a new interpretation to at least some lexemes, e.g., by forming metaphors.

Discourse grammar also operates at all three levels. Its syntactic part governs the syntactic relations between the sentences or chains of sentences of a discourse, its phonological part the phonological and its semantic part the semantic relations. Now, of course, the discourse structures of natural languages are so manifold that discourse analysis has not yet got beyond the description of individual linear discourses. It is, however, a special property of poetic texts (of at least some literatures) that their discourse structures show a high degree of regularity so that it is not particularly difficult to find the system which generates them. For example, it is characteristic of literatures based on parallelism that every (or almost every) sentence reoccurs, regularly distributed, in identical structure. The syntactic and semantic relations between such identically structured sentences are exceptionally simple and their distribution is subject to definite rules (thus determining the discourse structure). — Compared with this, the phonological relations between the sentences of a poetic text are of still more universal significance: they form the verse system.

Method of Discourse Analysis

In literatures the discourse structures of which show a very high degree of regularity a *p*-theory based on discourse analysis is of far greater significance than a *p*-theory based on sentence analysis because the discourse structure of such poetic texts deviates far more from that of normal discourses than their sentence structure from that of normal sentences. As Cuna literature is of this type, the method of discourse analysis needs some explanation, whereas sentence analysis can be immediately understood in the sense of traditional linguistics.

The immediate material for analysis would be poetic texts, as a linear continuum must first be segmented. But as the linguistic analysis of the sentence structures can be considered as given, one can immediately proceed from the minimal elements of the smallest inventory (e.g. the phonemes) via the sentences, etc. to the large segments of the discourse. In the process

one finds at the lowest level many elements, many of which are equivalent to one another, at the highest level few elements, few of which are equivalent.

At all levels the method is in principle the same: one distinguishes between such elements and sequences of elements which are equal to one another and such which are not. Sequences containing one subsequence of equal elements and another of unequal elements (e.g. AB and AC, where B or C may also be zero) are regarded as equal sequences, if the different subsequences (B and C) do not occur without the common subsequence (A) and if they are immediate constituents. More generally: one distinguishes between such sequences which have the same structures or transformations of the same structure and which have in common a subsequence in corresponding positions, and such sequences which have different structures and no common subsequence, i.e. between equivalent and unequivalent sequences. An intermediate case arises if two sequences have a common subsequence but different structures, or if two sequences have identical structure and a common subsequence occurring in non-corresponding positions (i.e. not resulting from transformations of a kernel structure). — The second intermediate case hardly occurs in Cuna literature and may be left unconsidered, the other two will be treated as intermediate cases.

Next at each level of analysis matrices will be constructed. For poetic texts (or parts of poetic texts) by writing down a symbol for each sequence, choosing different symbols only for non-equivalent sequences. The symbols are written down from left to right and from top to bottom in the order of the corresponding sequences, so that the different symbols appear in rows, the same symbols in columns. Each of the matrices then gives the discourse structure of a poetic text (or a part of it) at a certain level of analysis. The method sketched above is a simplified version of the "discourse analysis" developed by Zellig Harris (1952, 1963). Now, however, we can utilize the specific features of verse poetry.

The matrices are so rewritten that all sequences of a section (called "verse", "verse section" or the like) which the poet has clearly identified as an entity by surrounding pauses appear in a row. Then equivalent sequences appear in a row as well as in a column.

Now we see, however, that the distribution of equivalent sequences in the matrix is by no means arbitrary, but shows certain regularities. These regularities can be made explicit by constructing a general matrix in which the positions are marked into which equivalent or non-equivalent sequences may be inserted, allowing the construction of all empirically encountered matrices.

A general matrix of this type represents the subsystem generating (or able to generate) the chains encountered at one level of analysis. All these subsystems taken together represent the system which generates (or is able to generate) the poetic texts. This system will be called *theory of a poetry (p-theory)*.

Method of Semantic Analysis

The range of interpretation of such a generating matrix must be large enough to cover a segment of discourse, to which the same matrix may be again applied subsequently and so forth, i.e. at each level a discourse is made up of segments, all successively generated by one matrix with different interpretations. At the phonological level these segments are called "verses", the generating matrix "verse matrix". At the syntactic level "verse series", the generating matrix "verse series matrix". The two matrices taken together determine the microstructure of poetic texts. The segments covered by them vary in length.

Difficulties appear at the semantic level, primarily because there is still no adequate semantic theory in linguistics. — To begin with, the semantic relations between equivalent segments (sentences) can be treated immediately within the framework of the verse series matrix, because it gives the distribution of equivalent segments of sentence length, and because the number of types of semantic relations between equivalent sentences is necessarily small. These types, therefore, can be included in the microstructure. The verse series matrix thus is not only of syntactic but also of semantic relevance.

Now, however, in the total length of a discourse we find content equivalences, because in one text certain contents occur repeatedly with small variations. These equivalents determine the macrostructure which, for its part, no longer covers segments of texts but entire texts. It has both a syntactic and semantic aspect, which already follows in general from the fact that (syntactic) distribution and meaning, though not identical, are closely connected (cf. Harris 1964: 38 seg., 1963: 10). While, however, in the macrostructure the syntactic relations—apart from a few exceptions—are so loose that an underlying system can no longer be made explicit, the semantic relations—in so far as they can be grasped intuitively—are obviously quite regular. Given a manageable method of symbolizing meaning (resp. "content") independently from the syntactic and phonological representation, it may be assumed that the macrostructure also

could be represented by a generating matrix. However, as this is hitherto not the case—even the methods of content analysis (cf. Sebeok and Ingemann 1956, Armstrong 1959) in view of the complexity of the material are quite insufficient. — It is necessary to apply rather intuitive methods to the macrostructure. It is, however, possible to approximate the exact methods of discourse analysis if all synonymous sentences are regarded as equivalent, and if sequences of sentences are rearranged, shortened, lengthened, etc.

IA- and IP-Models

By means of an algebraic transformation the matrix representation may be replaced by an operative representation. The *p*-theory would then be expressed by rules of substitution.—According to Hockett (1954), in linguistics representations in matrix and operative form are called IA-models (item and arrangement) and IP-models (item and process) respectively. IA-models identify chains with a certain structure, IP-models generate them. Since Chomsky (1957), in linguistics preference is usually given to IP-models, because they can be more easily expanded according to rules of transformation, and because they are better suited to the requirements of the linguistic theory of “generative grammar”. Now, although rules of transformation are necessary in Cuna grammar, they are hardly required in Cuna poetry. It is convenient to eliminate the grammatical-syntactic rules of transformation from the *p*-theory and to treat them separately, in order to have an arbitrary choice between IA- and IP-models.—Although we have conceived in this paper the *p*-theory as a generative theory, we have retained the matrix representation, as it seems easier to understand and as its transformation into an IP-model is a purely mathematical process, which yields no additional information. Similarly the range of application of the matrices—in particular at the syntactic level—has been reduced vis à vis the stipulated requirements, because this also considerably increases the intelligibility without resulting in a loss of information. Regaining their general form is also a purely mathematical problem.

Remark on a Generative P-Theory

Now the question arises: what importance should be attributed to the rules of a *p*-theory? Here a theory can be constructed which is analogous to that due to Chomsky (in Fodor and Katz 1964) on generative grammar—a

task already partly performed by Bierwisch (1965). Now the presented *p*-theory is of course an empirical one, explaining the facts encountered in the poetic texts in so far as they can be derived from it. This interpretation, however, immediately gives rise to the further question of how this fact itself can be explained. The answer one is tempted to give is that the poetic texts are in fact generated by a mechanism, of which the presented *p*-theory is an isomorphic mapping, and which is located in the brain of the poet as an internalized (or innate) mental structure, in which case everything else could be relegated to a brain specialist. This is the hypothesis of mentalistic structuralism. It is problematic in two respects.

It is conceivable—and has actually happened in corresponding cases in linguistics—that alternative theories are developed, which also explain the encountered facts but are not isomorphic to the first theory. Then, however, it is not clear which of the theories found is the isomorphic mapping of the actual generating mechanism. According to an epistemological tradition one could then let Occam's razor decide among the theories under consideration, i.e. one considers the simplest theory to be the "most correct". If, however, it is further maintained that the chosen theory is the mapping of the actual generating mechanism, one must assume that Occam's razor is also the principle of decision underlying mental processes. The investigations of the process of internalization (e.g. of grammar) could confirm this.

Therein also another fact, otherwise incomprehensible, finds a simple explanation: the subsystems of the *p*-theory show an astonishing similarity. One could almost say that they have isomorphic structures. This is clearly the result of a diachronic process, since the phonological subsystem of the poetry had a completely different structure as late as the 19th century—and this applies even today in some villages which have preserved numerous other features from past centuries. The underlying historical process can be so conceived that initially a certain principle of construction applied only to a subsystem (e.g. to the syntactic subsystem of the *p*-theory), and spread out from there. The result of this process is a simplification of the *p*-theory, i.e. a reduction of the number of rules the poet has to know and consequently store in his brain by way of internalization. Interpreted as a mental process, this is the result of an application of Occam's razor, or rather of its mental equivalent. Of course, such simplifications can be made only as long as the richness of the system is not affected. But this is not the case, because the subsystems operate at different levels of the language. The identity or similarity of the structures of the subsystems may also be formulated in an IP-model: the subsystems are generated by a single system. In a deeper

sense this would be understood as “*p*-theory” because it would then in fact be a system, and not a mere set of subsystems. (Only for the sake of greater intelligibility has a description of this system not been included. Its construction from the subsystems is a purely mathematical problem.)—The justification for a mentalistic interpretation of a certain description of a structure can never be derived from such a general theory of structures, because, given a certain theory, it is always possible to conceive of a simpler alternative which would yield the same results. For this reason a large group of structuralists (above all the Bloomfield school) rejects a mentalistic interpretation and regards structural description as merely a convenient way of describing the facts, i.e. of summarizing the results. For a long time a controversy has existed between the two groups, which has become known as “God’s truth vs. hocus pocus”. It is not the task of a case study of describe this controversy in full detail. Here we state only that the given theory can be an approximation of a mapping of the corresponding mental processes. The mentalistic interpretation, however, appears more plausible, because the given theory is also capable of explaining the writing system of the Cuna, for it chooses as units the segments of the *p*-theory, and takes advantage of the rules of their arrangement in the form of rules of redundancy.

The second fact which makes a mentalistic interpretation problematic has already been referred to by the concept of internalization, which implicates social processes.—Once a certain mentalistic interpretation has been chosen, one can by no means leave everything else to a brain specialist. For neither does the poet start composing poetry *ex nihilo* (Marx), nor does that which he finds exist in an eternally prestabilized state, as many structuralists (e.g. Levi-Strauss) seem to believe. On the one hand that which he finds is of course much richer and more manifold than that which is understood here by *p*-theory, on the other hand, a *p*-theory is also the result of a historical process. Not as if it were possible to completely derive its structure functionally from social conditions, as the functionalists (e.g. Malinowski 1954) think—a point which has been disproved above all by e.g. Levi-Strauss (1965)—but, nevertheless, its mode of transformation and evolution is at least indirectly determined by the changes of the social conditions. The investigation of these very conditions and relations is the purpose of an ethnological theory of literature. The result is both an essential increase in the scope of interpretation of structural description, and a restriction of its purely mentalistic explanation.

This also indicates the relevance of a *p*-theory: it determines some conditions of the poet’s activity—nothing more!

Definition of Poetic Texts

Up to now we have assumed that it is known in advance which texts are "poetic texts". Since a definition of poetic texts is necessarily an intensional one (otherwise we could not speak of a (potentially) infinite set), it implies a definition of literature or poetry. Such definitions—as unsatisfactory as they all may be—have been produced in large numbers by the science and sociology of literature. Applied to Cuna literature, they would to a large extent define completely different sets of discourses as "poetic texts".—For the present we have at any rate to begin with our own prescientific understanding of literature, even if we were to decide to understand as "Cuna literature" all that which the Cuna call "ikala" (or "namakket"), for to translate these expressions as "literature" already presupposes our prescientific understanding of literature.

In this way one arrives only at an unprecise definition, which cannot be operationally applied. The same holds for the scientific definitions. The reason is presumably the same in both cases: both have been formulated against, and are consequently more or less interwoven with the background of "Occidental" culture. Presumably this difficulty cannot be completely eliminated, but it is possible to reduce its impact, curiously enough by a rigorously formalistic procedure. The given set of discourses is examined and arranged in subclasses according to formal-linguistic criteria at one level of language—preferably at the phonologic one, because this is the one at which theoretical research is most advanced. The discourses of one of these subclasses show a high degree of regularity in their sound structure. This subclass is thus determined by a quality which in our prescientific understanding is characteristic of poetry. This subclass may therefore tentatively be termed "class of poetic texts". As the investigation proceeds further, it is seen that it is compatible with our prescientific understanding of literature also at the syntactic and semantic levels. Its sociological analysis yields further evidence. Thus the translation as literature of the Cuna expressions "ikala" (or "namakket") which in fact denote precisely this class of discourses, can be justified. This phenomenon may be explained in the framework of the *p*-theory outlined above: the subsystems of the *p*-theory show a tendency towards structural equivalences. A set of discourses marked by common secondary structural features at the phonological level must therefore also be characterized as a uniform set by analogous secondary structural features at the syntactic and semantic levels. The specific nature of the structural features is accounted for by the properties and the historical background of the social order.

2. MICROSTRUCTURE

Syllabic Structure of the Colloquial Language and Syllabic Structure of the Poetic Language

The basic unit of the verse system is the syllable. —

Poetic language differs from normal language in that it consists of ordered sequences of accentuated and non-accentuated syllables. The accentuation of a syllable can take the form of stress, length, pitch, and tonality (cf. Kaiser 1964: 241 seq.).

Although all these means of accentuation occur in every language, in each case a verse system is constituted by only one of them (in rare cases by two). In most cases the choice of the means is determined by the syllabic structure of the language. Even when this is not the case, the aesthetic effect of the verse will largely depend on the relation between the syllabic structures of poetic and colloquial language. We therefore investigate first the syllabic structure of colloquial language and next its relation to that of poetic language.

In the colloquial language of the Cuna—the ceremonial language, which in many respects is an intermediate form between colloquial and poetic language (cf. Puig 1948: 28), will here remain unconsidered for the sake of simplicity—it is possible to distinguish between open and closed syllables, i.e. between those ending in a vowel and those ending in a consonant. In open syllables the vowels are short (unless they form a diphthong), in closed syllables they are long. Apart from that, however, there are superlong vowels, which in closed syllables are twice as long as a long vowel, in open syllables as long as a short and long vowel taken together. When double or geminated consonants occur, as at the beginning or at the end of a word, the preceding vowel is short, while the syllable in which it occurs is long. The vowels in open syllables tend to be pronounced carelessly or not at all (unless they occur in open syllables of monosyllabic words, or of words having only two syllables which are open). All long syllables—except for closed syllables at the end of a word—can be stressed. However, the stress is not significant (cf. Holmer 1947: 19–24; 1951: 39 seq.).

One would expect this syllabic structure to be applied in poetic language to produce rhythms. But just this is not the case. — In poetic language all short syllables of colloquial language become long, so that all syllables except for those containing superlong vowels are of equal length. These are of exactly double length, but they are so rare that they can in no case produce rhythm. All syllables are equally stressed. It is true that by listening

closely one can detect relative differences in the intensity of stress, but these will completely escape the notice of the indigenous listener, who is the only one who matters in this context. With certainty they have nothing to do with the verse system.

There are cases of an occasional rhythm in tonality produced by sequences of identical vowels, which is nevertheless irrelevant for versification, and constitutes a secondary phenomenon.

Now that all features of the language which might be used as means of accentuation are not only not employed in the construction of a verse system, but in addition rigorously eliminated from the poetic language, only the fourth of all the available means remains for the constitution of the verse system, namely the accentuation of syllables by varying pitch. This very principle, which—except perhaps in the case of sentence intonation—plays no part at all in colloquial language, constitutes the verse structure.

In the poetic language each syllable is attributed one of three pitches. This is not done on the basis of syllabic structures or of the vowels, but to a certain extent it depends, though indirectly, on the position of the syllables in the sentence (cf. Gasso 1912: 253; Holmer 1952 b: 8). The three pitches—from high to low—will be denoted by *a*, *b*, *c*. *a* is the “keynote”. With the exception of all those cases in which a recitation is accompanied by an instrument, *a* is fixed for each recitation of each text by different reciters in potentially different ways. How it is fixed will then be determined only by physiological factors, viz., the frequency range of the reciter’s voice. Once *a* is fixed for a certain recitation, however, it cannot be altered. *b* lies a full-tone level above *a*, *c* a full-tone level above *b*. One of these two full-tone levels can be replaced by one double full-tone level, so that either *a* and *b*, or *b* and *c* are separated by two full-tone levels. This choice, too, if made at all, is valid for a whole recitation.—Occasionally the reciter fails to hit a tone exactly. The difference, however, is always smaller than 1/4 tone, certainly unintentional, and will not be considered in the following. As a rule the tones are clearly separated from each other, slurs occurring only in definite positions. The duration of a tone lies between 1/4 and 2/3 sec., depending on the recitation. *c* has a combinatoric variant *c'*, which lies a full-tone above *c*. *c'* performs the function of the emphatic stress of the colloquial language. *a* has a combinatoric variant *a'* which lies a full tone below *a*.

Accompaniment by an instrument occurs only during the recitations of the Kantules (see 1.2. of the catalogue in the appendix). It consists of a

percussion instrument, the maraca, and a flute (cf. Krieger 1926: 116 seq.; Densmore 1926: 7; Garay 1930: 68), which are both played by the reciter himself.

The maraca accompanies each syllable by exactly one beat. All beats are equally strong; only in the pauses between the verses is the maraca beaten somewhat harder. Two tones are blown on the flute, 'a and c'. It can of course only be blown in the pauses between the verses.—The instrumental accompaniment is thus completely adopted to the structure of the recitation, and thereby transparent.

The same "keynote" must be fixed for all recitations accompanied by the same flute. A further standardization of the "keynote" is effected by a conch horn, which is occasionally shortly blown at the beginning of a song (cf. Densmore 1926: 11), and differs from the flute in that it gives not 'a but a.

As a "keynote" is fixed for each individual recitation, the tone registers in the poetic language of the Cuna differ from comparable phenomena in other languages, in particular from the phonemic tone registers of the tone languages, in which only the relative differences in pitch are relevant.—For this reason the recitation must be termed "singing". The subjective impression conveyed by most recitations comes, however, closer to one of elevated speech (similar to that which European poets often employ in reading their poetry). This impression arises on the one hand because the "keynote" generally lies in the range of the normal speaking voice of the reciter and on the other hand, because only the two pitches c and b are assigned to the greater part of the syllables of a verse. (This is especially the case with epics and historical-political poetry, less, however, with "simple texts".)

Finally the deciding factor is that the structure of the pitch sequences is not determined by a melody which is applied to the entire text, but that all pitch sequences of all realisations of all texts are generated by one single rule. The expression best suited to describe this condition is "recitation". Presumably it is the most adequate translation of the Cuna word "namakke". — The prejudiced European is of course unable to detect anything else in the recitation than a sort of "squalling" or "bleaking" (cf. e.g. Puig 1948: 91).

Verse Matrix

The basic element of Cuna literature is the verse. It is built on a melodic principle, i.e. generated by a melodic verse system.—All verses (and only all verses) have a pitch sequence of the following structure: (I)

$$\begin{array}{cccccccccc}
 \underbrace{(a\dots a)}_{n_0^1}; & \underbrace{(c\dots c, b\dots b)}_{n_{11}^1} & \underbrace{(c\dots c, b\dots b)}_{n_{12}^1} & \underbrace{(c\dots c, b\dots b)}_{n_{21}^1} & \underbrace{(c\dots c, b\dots b)}_{n_{22}^1} & \dots & \underbrace{(c\dots c, b\dots b)}_{n_{k1}^1} & \underbrace{(c\dots c, b\dots b)}_{n_{k2}^1} & \underbrace{(a\dots a)}_{n_{k+1}^2} & \underbrace{(\emptyset\dots\emptyset)}_{n_{k+2}^1} \\
 * & ; & \underbrace{(c\dots c, b\dots b)}_{n_{11}^2} & \underbrace{(c\dots c, b\dots b)}_{n_{12}^2} & \underbrace{(c\dots c, b\dots b)}_{n_{21}^2} & \underbrace{(c\dots c, b\dots b)}_{n_{22}^2} & \dots & \underbrace{(c\dots c, b\dots b)}_{n_{k1}^2} & \underbrace{(c\dots c, b\dots b)}_{n_{k2}^2} & \underbrace{(a\dots a)}_{n_{k+1}^2} & \underbrace{(\emptyset\dots\emptyset)}_{n_{k+2}^2} \\
 \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
 \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
 \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
 * & ; & \underbrace{(c\dots c, b\dots b)}_{n_{11}^m} & \underbrace{(c\dots c, b\dots b)}_{n_{12}^m} & \underbrace{(c\dots c, b\dots b)}_{n_{21}^m} & \underbrace{(c\dots c, b\dots b)}_{n_{22}^m} & \dots & \underbrace{(c\dots c, b\dots b)}_{n_{k1}^m} & \underbrace{(c\dots c, b\dots b)}_{n_{k2}^m} & \underbrace{(a\dots a)}_{n_{k+1}^m} & \underbrace{(\emptyset\dots\emptyset)}_{n_{k+2}^m}
 \end{array}$$

Here $\underbrace{(x\dots x)}_n$ means: x may occur n times successively. \emptyset means: pause

of the length of one syllable. The positions in the matrix marked by * are left blank. The semicolon separates $(a\dots a)$ from $(\emptyset\dots\emptyset)$ and from n -tuples of pairs of $(c\dots c, b\dots b)$. The first symbol in the first row represents the beginning of a verse, the last symbol in the last row its end. A row is called verse section.

If we substitute for each of the differently indexed n and for k and m an arbitrary positive integer, we obtain an interpretation of the matrix. The possibilities of interpretation must, however, be limited and this is done by the following conditions:

$$\text{(II)} \quad n_0^i \geq 0; (n_{11}^i \geq 1, n_{12}^i \geq 1), (n_{21}^i \geq 0, n_{22}^i \geq 0), \dots, \\
 (n_{k1}^i \geq 0, n_{k2}^i \geq 0); n_{k+1}^i \geq 1; n_{k+2}^i > 0.$$

Moreover we have:

$$\text{(III)} \quad (n_{21}^i \geq 1 \Leftrightarrow n_{22}^i \geq 1), (n_{31}^i \geq 1 \Leftrightarrow n_{32}^i \geq 1), \dots, (n_{k1}^i \geq 1 \Leftrightarrow n_{k2}^i \geq 1).$$

(i.e. only ordered pairs $(c\dots c, b\dots b)$ are admitted) and

$$\text{(IV)} \quad n_{k+1}^m \geq 2; n_{k+2}^m \geq 2.$$

If these restrictions are observed, each interpretation yields a poetically acceptable pitch sequence of a verse. Conversely, any pitch sequence of an actually encountered verse is exactly described by precisely one interpretation of the matrix, if the restriction of the range of possible interpretations is not violated.

In addition to the restrictions already mentioned there are others which

mainly can be derived from physiological factors. A verse section must be spoken in one breath, only at the end can the reciter breathe in (as he needs a pause for this). Therefore we have (approximately):

$$(V) \quad (n'_{11} + n'_{21} + \dots + n'_{k1}) + (n'_{12} + n'_{22} + \dots + n'_{k2}) + n'_{k+1} < 20$$

(In the case of the first section of a verse n'_0 is to be added.)

One finds empirically that n and k never exceed 6, the reason presumably being the limited duration of one breath:

$$(VI) \quad n \leq 6, k \leq 6.$$

The average value of m lies between 3 and 4, the highest value found in the material investigated is, however, $m=27$. But it follows by no means from this that 27 represents the maximal admissible value of m , however, it is expedient—at least for the time being—to assume

$$(VII) \quad m \leq 27$$

in order to prevent the verse matrix from generating infinite series. Now it is necessary to introduce some extensions of rule (I): If a syllable is to be especially accentuated, this is possible only in positions in which it would normally be assigned the pitch c . In these cases, however, it is not assigned the pitch c but c' :

$$(VIII) \quad c \rightarrow c'$$

(i.e. c' may be written instead of c). This process corresponds to that of emphatic stress in the colloquial language. c' also may be substituted for several consecutive c 's.

' a can follow a (a , ' a). But then (IX) applies:

($a \dots a$, ' $a \dots a$ ') must be followed by (\emptyset), ($b \dots b$, $a \dots a$), (' $a \dots a$ '), in other words: After ' a the normal rules apply, except that all pitches are lowered by one full tone.

In two of the phonologically investigated texts c does not occur at all. The rules (II), (III) and (IX) therefore do not apply; (IV), (V), (VI), (VII) do apply. (VIII) is to be reformulated:

$$b \rightarrow b'$$

(where b' is obviously equal to c).

In all cases (2.1. and 2.2. of the catalogue) in which a saila recites he is assisted by another saila. The latter sings at the end of each verse a long drawn-out "tekíee", with pitches a , (' $a \dots a$ '), ($a \dots a$), where ' a has a free variant " a which lies a full tone below ' a . The transitions from a to ' a

(resp. "a) and back to *a* are always slurred in this case. The same phenomenon may also occur in the last (*a...a*)—sequence of a verse, if $n_{k+1}^m \geq 4$.

The transparency of the verse structure is intensified by the distribution of an otherwise meaningless syllable "ye", which may appear in positions prominent in the structure of the text, always in double or fourfold length of a normal syllable: at the beginning of a text it appears in a sequence *c, b, a*, and thereby fixes the three pitches of the text. This sequence can be repeated between some of the following verses. "ye" marks rather often the end of a verse section, and almost always the end of a verse. In those cases in which a verse ends in a vowel, the latter can assume the function of "ye", so that the last syllable of each verse is of double or fourfold length. If the verse section ends in a vowel, this, too, can assume the function of "ye".—The sequence "ye, ye, ye", at the beginning of a text may be replaced by a syllable "wai", which is difficult to analyse phonetically, and is casually uttered with forced breath. This syllable then fixes the "keynote" (*a*). (The function of "wai" may again be performed by the tone of a conch horn.)

In each individual recitation of each text there are further orders (as a further specification of (I)), which, however, never occur in a completely schematic fashion, but are always only partly realised. They may all be derived from a general intention to achieve an equilibrium in verse structure.

Three maxims may be set up for this:

- (a) In a verse section the alternation between (*c...c*) and (*b...b*) should take place at intervals as regular as possible.
- (b) As many verse sections of a verse as possible should be interpreted by the same values.
- (c) As many verses of a text as possible should be interpreted by the same values.

All three maxims result in an increase in the number of order relations, and thus contribute towards the aesthetic effect.—But the most significant effect, which is in fact the governing component of the verse structure, is achieved by (a): the regular succession of high and low syllables constitutes the basis of a verse rhythm. In particular the famous poets (e.g. Antonio Lopez) make especially extensive use of this possibility. It is therefore likely that the verse rhythm occupies an especially high position in a scale of poetic values.—

The hypotheses set up on the verse system of the Cuna are empirical statements, which of course do not exclude certain "exceptions". If we now maintain that the Cuna poets themselves use this system of rules (or an

equivalent one) in producing their texts, we must interpret all “exceptions” as deviations from the norm. Thus the statements are by no means immunized, for one could correct a defective text and then present both versions to a Cuna audience, which would decide on the poetic value of each.—The assumption that the deviations are unintentional may be supported, however, without such a test: the frequency of error remains on the average below 1% (maximal value for one text 4.8%). Significantly enough, the errors occur predominantly at the beginning of a recitation—a situation which also occurs at other levels of analysis, and we know from the Cuna themselves that in the beginning a reciter finds a certain difficulty in correctly articulating poetic speech (Garay 1930: 20).—

The verse system may be further illustrated by some examples:

The pitch sequence of the text 1.2.4. E, recited by Roberto Pérez, is to be transcribed as follows (tone pitches in () belong to a syllable of double length): Verse:

(cc)(bbbb)(aaaa)øø (=ye, ye, ye)

1. (c'c')c'c'bcbaaaøcb(aa)(aa)øø
2. (c'c')bcbbaaaaøcbbaaøcba(aa)øø
3. (c'c')bcbbaaaaøcbbaaa(aa)øø
4. (c'c')c'c'cbbaaøccbcbb(aa)(aa)øø
5. (c'c')c'c'cbbaaøccbcbb(aa)(aa)øø
6. (c'c')c'c'cbbaaaaaøcbcb(aa)(aa)øø
7. (c'c')c'c'cbbaaaaaaøcbcb(aa)(aa)øø
8. (c'c')c'c'ccbcbbaaøcbcbbbb(aa)(aa)øø
11. (c'c')c'c'ccbcbbaaaaøcb(aa)(aa)øø
12. (c'c')c'c'c'c'cbbaaaaa(aa)øccbcbb(aa)(aa)øø
13. (c'c')c'cbbaaaaa(aa)øccbcbb(aa)øcb(aa)—

The pauses between the verse sections cannot be determined exactly. In this matrix the rules of the verse system are not infringed upon.—

The maxims (a), (b), (c) are all represented. On (a): in each verse section (with the exception of the second verse section of verses 1 and 11 and the third of 2 and 13) a uniform melodic rhythm results from the sequence (cbcb) (in verse 2 and 3 as c' b c b). On (b): an equilibrium between the verse sections of a verse is produced by the formula (c...c, b, c, b...b, a...a). On (c): all verses of the text are described by interpretations of the matrix in approximately the same values. In particular, verse 1 and 11, 2 and 13, 4 and 5, 6 and 7, 8 and 9 and 10, 12 and 13 are equivalent, i.e. as a rule they are consecutive verses.

1.2.2 B, recited by Kantulippi, offers characteristic examples of the attempt to achieve harmony among the sections of a verse:

(cc) bb to cc (bb) in verses 1 and 5;

ccbbbbb to ccbbbbb in verses 1 and 2;

ccbbbbbbaaa to ccbbbbbbaaaa in verse 3 (this case is especially interesting, since the third *b* in the first verse section is a syllable without linguistic function, which can only be inserted for aesthetic reasons); (cc)bcbb...aaaa to ccbcbbaaaa in verse 8.

Diachronics of the Verse System

The synchronic analysis of the verse system is based on material dating from 1924 to 1959 (wax cylinders, type recordings). No change in the verse system can be observed in this period. It is true, that certain acculturation phenomena may be observed—beginnings of the formation of melodies, very well possible in the framework of the verse system—(in particular in the songs of Iktwaniktippi), but these are found more frequently in the earlier recordings than in the later ones, because after the revolution (1925) a certain cultural purism was deliberately encouraged by the Cuna.

A completely different picture, however, is produced by the description of the verse structure which still exist from the time before 1900 and afterwards, from the extreme eastern part of the Cuna area, which in addition has preserved numerous other archaisms (cf. Holmer 1951: 77 seq.). The descriptions, however, are not based on exact analyses, but on subjective impressions.

From the 17th century we know only that the singers accompanied their songs with maracas (as some still do today) and “the sad sound of the drum” (1640) (Salcedo 1908: 130, 134). It seems reasonable to assume that the instruments of accompaniment are in general closely related to the structure of the song. One would therefore conclude from this information that rhythm, in Cuna poetry in the 17th century, stood much more in the foreground than it does today, especially because drums and drum-like instruments are no longer used by the modern Cuna (cf. Densmore 1926: 11), a very rare phenomenon in the music of a tribal people.

More detailed descriptions date only from the second half of the 19th century. According to A. Reclus (1888: 355) and Wyse (1886: 46) (who, for that matter, frequently copied from one another) the first part of a verse was pronounced usually slowly, the stress always being on the last syllable

of the word. The reciter then abruptly goes over to an accelerated rate of articulation, gradually lowering the tone; a long pause then follows during which those present utter a long drawnout "hmm" or "bêê". — The statement that all words are stressed on the last syllable can hardly be based on a competent judgement, since the word boundaries of the Cuna language are difficult to observe, and Reclus and Wyse had no knowledge of the language. Since a stress on the final syllables is inconsistent with the syllable structure of the Cuna language, this statement must be regarded as at least dubious. On the other hand it is certainly true that the verse consists of sequences of stressed and unstressed syllables. There is also good evidence for the strikingly long pauses from other sources (Viguier 1873; E. Reclus 1958: 158, Valdes 1890; Bell 1909: 627).

The "hmm" in the pauses appears even today as "nhn" in the same position in historical-political texts and has about the same meaning as "yes" (Holmer 1952 a: 82). The falling sequence (*c, b, a*) at the end of today's verses can be recognized in the gradual lowering of pitch at the end of a verse.

The otherwise very reliable E. Restrepo (1888: 128) reports, in contrast to A. Reclus and Wyse, that the first syllables of a verse are spoken very quickly, and the following articulated of "sung" with emphasis. In this respect he probably has committed an error, since Viguier (1873) too writes that first two or three syllables are "sung" and the following then recited in one breath. — The report of Restrepo is of lesser importance, as it is not concerned with verses in literature but refers to the exceptional use of verses in conversation.

We thus have the following overall picture: old and modern Cuna verses are clearly marked by pauses. The last part of the verse has in both cases a falling pitch sequence. They differ insofar as the old verse, unlike the modern, is sung melodically, slowly and is accentuated, the second part is then uttered in a sudden and quick cadence. — This corresponds to a verse form which Holmer (1951: 20) has found even today among the eastern Cuna.

One explanation for the change has already been mentioned: the basic structure of the old verse was seized and transformed by an alien principle of construction. In the process certain features (falling line, pauses) which were so to speak irrelevant for the new principle of construction could be retained. — The problem now is to uncover this principle of construction at the syntactic level.

Syntactic Relations between Parallel Sentences

The term parallel (or equivalent) will be applied to those sentences which follow one another immediately or at regular intervals, and are generated by the same syntactic (grammatical) marker, i.e. show the same phrase structure (or are transformations of the same phrase structure)—where one constituent may also be substituted by its immediate constituent—if they have a common subsequence, and if clearly recognizable relations exist between the semantic interpretations of the final chains, i.e. if the sentences refer to identical, analogous, consecutive, or causally related facts. — These assumptions guarantee that also the speaker who does not reflect in linguistic categories recognizes the structural equivalence of parallel sentences (cf. Jakobson 1965: 21).

Unlike most forms of parallelism in the Old World that of Cuna poetry is not based on a binary principle but on n -tuples, i.e. a parallel construction consists of n parallel sentences (where n must of course be at least 2). If, however, arbitrary members of an n -tuple are grouped in pairs, all syntactic and semantic relations which can exist between the members of an n -tuple will also occur between the members of the pairs. It is therefore sufficient to demonstrate these relations in the case of pairs.

The first member of a pair will be called primary verse, the second secondary verse (“Hauptvers” and “Nachvers” in the terminology due to Steinitz (1934) employed here).

To a large extent the relations between primary and secondary verse are the same in Cuna literature as in other literatures using parallelism. This is due to the fact that there is only a limited number of possible structures of parallelism which, if used at all, are employed almost without exception.—Here we describe first the syntactic, next the semantic relations.

I. The secondary verse can be an identical repetition of the primary verse, but only if further sentences are inserted between primary and secondary verse:

Pinakinet uanaeyola:

Machi Nele Kikkanarmakkalele iwala suliwaliye!

Pinakinet uanaeyola:

...

(1.1.3 E: 218–221)

The old man admonishes:

Is this not the way of Machi Nele Kikkanarmakkalele?!

The old man admonishes:

...

(All Cuna quotations in this paper are given in phonemicised orthography (cf. A. Iglesias 1951; Holmer 1947: 5).—The numbers behind the catalogue numbers refer to the ordered verses of the text.)

II. Primary and secondary verse have isomorphic structures but are interpreted in part by different morphemes (of one class).

Kinkitur wanap urmaite,

Kinkitur wanap akikitte.

(1.4.1: 835)

The door of the morning star makes a noise,

The door of the morning star sounds.

The tense of the verb may very well vary in such verses:

Olotipikili ulu yaul imakkemai.

Olotipikili ulu yaul imakkali.

(1.2.1: 318–319)

Olotipikili's inner box sounds.

Olotipikili's inner box begins to sound.

III. Individual elements of the primary verse are either not parallelised, or there are elements in the secondary verse without a parallel in the primary verse. — The simplest form is a substitution of a personal pronoun for the subject, the former in most cases not appearing, being contained in the predicate. The substitution may take place in both the primary and the secondary verse:

Punawaka Olowilasopi wininarkan oniekwichi,

wininarkan aitonimakkekwichi,...

(1.4.1: 138, 139)

The girl Olowilasopi shows her pearls,

She lays her pearls in a winding pattern.

Or:

Tuukunneka ki aitikesii,

Kana neka aitikesii.

(3.2.2.1 a)

He sits in the chicha-house,

The medicine man sits in the house.

Also objects, adverbial phrases, adjectives, adverbs and pronouns may not be parallelised in the primary or secondary verse:

Ipekukitili ki saili nuatakkekwichi,

Saili tuiyekwichi.

(1.4.1: 265)

With the comb he arranges the hair,
he combs the hair.

Also several of these “irregularities” may appear simultaneously:

Kana ayammar panse imakkalie,
Ayamar tuuyop imaisa.

(3.2.2.1 a)

The medicine man’s friends speak to him,
The drunken friends speak.

In this case the genitive object of the primary verse is replaced in the secondary verse by an adjective, and in addition the pronoun of the primary verse is not repeated in the secondary verse.

In all of these cases the word order is most usually fixed, i.e. the secondary verse contains no transpositions in relation to the primary verse. Where this is the case, however, one can assume that the aesthetic effect of this transposition is clearly intended, since it appears predominantly in the most highly evaluated texts. — While the position of the predicate, which always occupies the last position in the sentence, is invariant in the Cuna language, the order of subject and object can be altered without changing the meaning of the sentence, if the object is given a postposition.

Uukkamol tarpa pa tuuleali,
Tarpa pa ani manesaul arutte.

(1.4.1: 43, 44)

The sail swells with the wind,
By the wind my boat lifts itself.

The paralleling of sentences or parts of sentences with such sentences or parts of sentences which are transformations of the same phrase structure occurs but rarely, and then mostly as a paralleling of a simple phrase with a relative clause:

Esanupokaleti na machi Inatoippiler na wakkilakwichikunonikki,
Machi Inatoippiler esanupokalet kala sunnumaali.

(1.4.1: 223, 224)

They turn to him who is now a ghost, the boy Inatoippiler,
They speak to Inatoippiler’s ghost.

Probably this is primarily due to the fact that the poetic language generally prefers paratactic constructions, and that the formation of passive and negation and the like is so simple in the Cuna language that it is not necessary (at this level) to consider them. — In dialogues, which are always

quoted in direct discourse, the paralleling of sentences and their negations (with exchanged personal pronouns) does play a part:

"Ampei innaipeapakilakana sunnawisisulititeeye".

"Pani innaipeapakilakana sunnawisikunnapinne".

(1.4.1: 198, 199)

"I know nothing about your people."

"You know something about my people."

In dialogues also the paralleling of interrogative and responsive sentences occurs:

"Nanasaila takkenaoe."

"Pani nanasaila pali takkewalikkaye?"

(1.4.1: 225, 226)

"We shall go and see (your) mother."

"Will you ever see my mother again?"

The most frequent case even in dialogues is the mere confirmation of the primary verse by the secondary:

"Ani walepunkwati urwetule mola uepa molati sunna yoltakkerpaye."

"Pe walepunkwati urwetule mola uepa molati sunna yoletakkerpa."

(1.1.5: 27, 28)

"My woman feels that she is clad in the hot garment of sickness."

"Your woman feels that she is clad in the hot garment of sickness."

With these forms of dialogue, however, we find ourselves no longer within the framework of literary parallelism, since this type of dialogue also belongs to the conventions of colloquial language. Here the poetic form is thus merely a reflection of social behaviour (cf. Holmer and Wassén 1947: 66; Levi-Strauss 1967: 211).

Syntactic Relations between Semi-parallel Sentences

Apart from the rigorous forms of parallelism, there are looser combinations of primary and secondary verse which could be called semi-parallelisms. They are intermediate forms between parallel and non-parallel verses, and frequently their function is to form a kind of slurred transition between two series of parallel verses. — Two types of semi-parallel combinations may be distinguished:

I. The secondary verse contains an identical repetition of the noun phrase of the primary verse, replacing, however, the verb phrase by a completely new one which may be of a different structure and bears no other semantic relation to the verb phrase of the primary verse than

describing actions and properties of the same subject, which in most cases follow each other in time in the framework of the overall process described in the given piece of poetry, or the content of the primary verse gives the reasons for the relationships expressed in the secondary verse:

Ai Tapkala walepunkwa nikkarpini,
 Ai Tapkala mu olotupkana mutulekalakan ilekuenaerpinie.
 (1.4.6 b)

Our friend Tapkala has just married a woman,
 Our friend Tapkala has just gone fishing, to the islands of the sea.

II. The object of the primary verse is repeated in the secondary, taking on, however, the function of the subject. In this way the impression of a parallelism of the primary and the secondary verse no longer arises, but that of an enchainment. This may be regarded as an analogy of the chain parallelism, in which the result of the process described in the primary verse becomes the point of departure of an analogous process in the secondary verse (cf. Walton and Waterman 1925: 38)—a form of parallelism which otherwise does not occur in Cuna literature:

Machimala olotupa naisikkekwichi,
 Olotupa ipyekwichi . . .
 (1.4.1: 126, 127)

The boys adorn themselves with golden chains,
 The golden chains shine . . .

In poetic texts in general each sentence occurs with at least one paralleling or semi-paralleling, where in the case of mutually semi-paralleled sentences the primary verse frequently is also the secondary verse, and/or the secondary verse is also the primary verse of a rigorous parallel construction.

Distribution of Non-parallel Sentences

The few non-paralleled sentences may occur in other positions of the same text and are strictly limited to definite positions in the discourse. As non-paralleled verses we have:

I. Formulas. These are stereotype figures of speech, which occur whenever the action requires it. (As they always occur several times in a text, they are in a way paralleled, although many other verses are inserted between them.) Example:

(Subj.) nakikukusapisuli puposmakkekwichi
 (1.4.1: 51, 113, 228, 709)
 (Subj.) weeps without being able to stop.

— a formula which can be applied whenever someone is struck with serious misfortune. As an introduction for descriptions of the weather the following formula is used in most cases:

(Subj.) neka palitakka (tense)

(1.4.1: 6, 100, 231; 1.1.7 a: 1, 2, 3 . . .)

(Subj.) observe (tense) the countryside.

Apart from that, however, there are formulas consisting of a parallel construction:

Uukkamor naikkamor yoasakwichi/esuekwichi

Uukkamor tapukkamor yoasakwichi/esuekwichi

(1.4.1: 124, 125; 262, 263; 268, 269; 461, 462; 471, 472; 1.1.7 a: 91, 92; 104, 105 etc.

He takes off his shirt, his trousers.

He puts on his shirt, his trousers.

He takes off his shirt, his white shirt.

He puts on his shirt, his white shirt.

The formula is the basic of unit oral verse epics (cf. Lord 1965: 30 seq.). In Cuna literature it is rather rare. If it occurs, it is used in the same way as other sentences. Only in the texts of one and the same author is it used in a constant form. If the same formula is used by several poets, certain modulations take place in most cases (e.g. in 1.4.1 uukkamola instead of umola—which is synonymous—as in 1.1.7 a). Moreover it is subject to the usual rules of paralleling, i.e. it can be paralleled n times. However, once a paralleling of this kind has been chosen, it will be retained throughout the entire text. (Thus e.g. a formula describing the preparation of meals has three parts in 1.4.1 and seven in 1.1.7 a.)

II. Said-verses (Sagte-Verse, cf. Steinitz 1934: 53 seq.). These are verses introducing a direct discourse. Since direct discourse occurs frequently in the texts introduced in most cases by a said-verse, this is the most frequent type of non-parallelised verses. Some of these might also be regarded as formulas, for they are often repeated identically:

Kanalelekwa nelekan nape uanaialie:

(1.1.5: 235)

The medicine man admonishes his neles:

(Further examples of said-verses are: 1.4.1: 178, 183, 197, 201, 253, 578; 1.1.5: 180, 195; 3.2.2.1 a: 5)

Apart from this there are, however, parallelised said-verses:

Nele Mummukkaler pan wakkilamaisa,

Nele Mummukkaler panka sunnomakkeinie:

(1.4.1: 191, 192)

Nele Mummukkaler turned to him,
Nele Mummukkaler began to speak to him:

III. Descriptions of "dramatic" events. If something unheard-of suddenly happens in the course of an action, if events "follow hot on the heels of one another", this is frequently described in non-paralleled verses in order to give the expression of the dramatic course of events an adequate form. "Turn the boat around, our boat sails with the wind."

The sun loses its light,
a shark comes up,
he attacks the boat-
the mother, we have no hope to see her again.

(1.4.1: 46-50)

IV. Transitions between scenes. The texts consist of and are based upon a sequence of successive scenes. Within the individual scenes special rules of paralleling apply, but the transition from one scene to the next, i.e. the concluding verses of one scene and the introductory verses of the next, frequently consists of non-paralleled verses. (E.g. 1.4.1: 110, 111; 175-177.)

V. Direct Discourse. The direct discourse (insofar as it is not a long drawn-out dialogue) can consist of non-paralleled phrases if it is made up of commands (e.g. 1.4.1: 27, 32, 34, 36, 40, 41) or it is a report on something related previously in the text (e.g. 1.4.1: 115-117). — In the first case the non-paralleling is conditioned by the content, in the second by the economy of narration: the listener is already familiar with the events; they therefore need no detailed description. Also in the cases III, IV, V paralleled verses may very well appear instead of the non-paralleled ones. In fact, this occurs in most cases.

Semantic Relations between Parallel Sentences

The semantic relations between primary and secondary verse can be found by means of a comparison of the facts expressed in them, only the denotative meaning being considered.—A comparison of the semantic markers (cf. Katz and Fodor 1963; Katz 1966) would of course be much more rigorous, but for this the linguistic exploration of the Cuna language is far too little developed. But it is to be emphasized that we have to investigate the semantic relations between sentences, not between words, for otherwise the syntactic markers would be neglected. However, the semantics of words can provide valuable hints (cf. Steinitz 1934: 179 seq.).

If primary and secondary verse denote the same facts, they are called synonymous-parallel (Steinitz 1934: 129 seq.). In this case the secondary verse does not supply any information not already contained in the primary verse. Its elimination would cause no loss of information. However, the secondary verse may contain new connotations and above all convey aesthetic information.

Nele Mummukkaler pan wakkilamaisa,

Nele Mummukkaler panka sunnomakkeinie.

(1.4.1: 191, 192)

Nele M. addressed him,

Nele M. began to speak to him

But even with a strict limitation to the denotations, synonymous-parallel combinations are most rare in the Cuna literature. For in those cases in which one might expect a synonymous paralleling the secondary verse is given a slight modulation, e.g., a variation of tense, so that still the same process is denoted but in a different stage, which makes the combination temporal-parallel; or the process is described under a different aspect in the secondary verse, which makes the combination varied-parallel. The avoidance of an exact repetition of a verse by the following one, which we have already noted at the phonological and syntactic levels, is now found to apply also at the semantic level. It constitutes a fundamental principle of Cuna poetry. The few (and without exception dubious) cases of synonymous-parallel constructions must be regarded as "exceptions", i.e., as unintended.

On the other hand, the semantic relation between primary and secondary verse (like the phonological and syntactic relations) must be as close as possible.—These relations are as follows:

I. Analogous-parallel. Primary and secondary verse denote analogous facts. The secondary verse conveys a message similar to that of the primary but not yet contained in the latter. If the secondary verse were dropped, information would be lost. Three types of analogy occur in this case: one fact is explained on several objects of one class, or several properties of one class are attributed to one object (enumerating parallelism (cf. Steinitz 1934: 104 seq.)). Example:

Punawak Olowilasop pan apitakkali,

Punawaka Tipikilisop pan apitakkali.

(1.4.1: 131, 132)

The girl Olowilasop waits,

the girl Tipikilisop waits.

All enumerating-parallel sentences of a construction may be transformed

into one single sentence by connecting the substituted elements by "and". However, this never happens in Cuna literature: the conjunction "and" does not exist in the poetic language of the Cuna.

If two contrary facts are explained on one object or if the same fact is explained on two contrary objects, we have an antithetical parallelism (cf. Steinitz 1934: 100 seq.).—There are no genuine cases of antithetical parallelism in Cuna literature:

Machimala pupattakkali,
Machimala kapitwarsate.
(1.4.1: 14, 15)

The boys awake,
the boys fall asleep.

Considered separately, the substituted elements in this case certainly are related antithetically. In reality, however, these (and similar) cases are rather special varieties of the temporal parallelism, for two consecutive actions of the same subject are denoted, even though in such a way that contrary statements are grouped together. The antithesis thus appears as a secondary principle of construction in a parallelism with a different primary structure. In this form it can also occur in enumerating parallelisms. Then we have an enumeration of objects of one class to which contrary attributes are assigned. The antithetical elements then could also be connected by "and".

Ikwatiliyaikan arkwaneta,
Ikwatilisopikan arkwaneta.
(1.1.6 a)

The girls, the little Ikwa-trees, descend,
the girls, the big Ikwa-trees, descend.

If one process is described under different aspects, we have a varying parallelism (cf. Steinitz 1934: 111 seq.).—It is similar to the synonymous parallelism. The secondary verse expresses the same fact as the primary, considering it under a different aspect, or describing an effect (which is irrelevant to the course of the action) of the process expressed in the primary verse. Thus the information contained in the secondary verse may be new, but the action can very well be understood without it, and it refers to the same stage of the action as the primary verse. Example:

Paniki iawala nek likaemai,
Iawar paniki nek onukkamakkemai.
(1.4.1: 261)

The river rushes along torrentially,

The river beats against the banks.

Peti nele kukuēyolaki,

Peti takke takke pa ipi satoeye.

(1.1.5: 235)

You become seers (Neles),

you will accomplish by seeing.

II. Facts which are not analogous but consecutive (necessarily within a larger context of action) are expressed in causal or temporal parallelisms. In a causal parallelism the primary verse gives the reasons for the facts described by the secondary. The two sentences could be transformed into a single one by inserting the conjunction "because" into the primary verse. However, this happens very rarely. Strictly speaking, such a construction should not be called "parallelism" and in fact it occurs mainly in semi-parallel constructions.

Ani uukkamola tuuleali tarpa pali kati,

Ani manesaur kinyenae kati.

(1.4.1: 29, 30)

Certainly my sail swells in the wind,

Certainly my boat sails along swiftly.

While in this case there are still a clearly identifiable syntactic equivalence and contextual links, which make the construction similar to a varying parallelism, the semantic relation in semi-parallel constructions is much less clear, as for example in:

Our friend Tapakala has just married a woman,

Our friend Tapakala has just gone fishing to the isles of the sea.

This, however, is made clear by the following verse:

For the sake of his woman our friend Tapakala lays the fishing rod into the boat.

(1.4.6 b)

Thus apart from the enumerating form of parallelism the temporal one is the most important (in Cuna literature).—The actions of one subject are divided into the smallest possible sections and described by means of a parallel construction. As no metrical concepts are used in the process, this division has (at least in practice) a lower limit because of the limited efficiency of the language, as for the description of one action only a limited set of expressions is available, which in turn can be combined with only a limited set of tenses. As not all poets describe an action in the same detail, different stages can be distinguished. The most intense description is achieved by combining a morpheme with various tenses:

Inapisepatili oloulu kiklimakkali,
Inapisepatili oloulu kiklimakkemai.

(3.2.1: 14)

The girl, the pisepa-plant, in the golden box, begins to move,
The girl, the pisepa-plant, in the golden box, moves.

In the next stage this variation of tense is abandoned, and the process is merely divided into those of its stage which can still be described by simple phrases:

Pinakineti pupa ituamakkali,
Pinakineti pupa arkaswamakkali,
Pinakineti pupa muchuppimakkali,

(1.1.5: 10, 11, 12)

The old woman puts one foot before the other,
The old woman touches the ground with her foot,
The old woman puts the other foot forward.

(The translation is necessarily free, for there are no corresponding verbs in English.)

If moreover details are dispensed with, some of the descriptions of actions are left out in the otherwise complete succession of descriptions, and finally only the beginning and the end of an action are mentioned, then being related antithetically, e.g.:

Machimala kapitwiarsatte . . .

Machimala pupattakkali . . .

(1.4.1: 15, 16)

The boys fall asleep . . .

The boys awake . . .

These verses describe the beginning and the end of sleeping.

In the last stage successive actions are expressed by one verse each:

Machimala uukkamola esuenae,
Machimala ipenirpakitupa ulupattiali,

(1.4.1: 37, 38)

The boys reef the sails,
the boys lower the fishing-line.

There is no stringent relationship between primary and secondary verse and the types of semantic relation. Each form of syntactic parallelism can show any of the semantic structures mentioned before. There are, however, certain preferences: the enumerating parallelism appears predominantly in constructions which are syntactically completely parallel; in the case of

an identical repetition of the primary verse by the secondary, at least the denotative meanings are identical in primary and secondary verse although the connotations vary because of the verses inserted between the two, i.e. because of the changed context; causal parallelisms occur predominantly in semi-parallel constructions.

Syntactic and Semantic Structure of the Verse Series

Hitherto only the structures of parallel pairs have been described. This restriction will now be abandoned in order to show the syntactic and semantic composition of the verse series, i.e., of several consecutive parallel sentences. A verse series can consist of arbitrarily many (parallel) sentences. In practice its length is of course limited by the fact that the language allows only a certain number of possible parallelings of one sentence and that too long verse series would probably cause the audience to lose interest. Nevertheless verse series with more than 300 parallel sentences do occur (e.g. 1.2.1).

Between arbitrary consecutive sentences in a verse series there is one of the syntactic and semantic relations mentioned before. If a verse series has more than, say, five members, there is the same syntactic and semantic relation between all of them (they then have the same structure as a verse group, see below). If it has less than, say, five members, between arbitrarily many of them there may be partly different, partly identical syntactic and semantic relations, with arbitrary numerical ratios and in arbitrary order.

If a verse series appears several times in a text, or if in a text a verse series is put in parallel with another, i.e., if a verse series consists of sentences which are parallel to those of another in the same text, these verse series are sequential, i.e., their sentences always appear in the same order (with occasional errors occurring). However, if the same or several parallel verse series appear in different texts they are, as a rule, not sequential. There are two intermediate cases: Verse series in different texts of one texteme (i.e., of a group of texts which the authors regard as identical but which actually are different realisations of the same conception of a text), regardless whether they are by one author or by severals, are approximately but not exactly sequential. The same in a case of a verse series in which the morphemes *olo-mani-ina-ikwa*, which have no denotative meaning, are substituted. In this series the first half is sequential in any case, the second, however, is not (insofar as it is not sequentialised by multiple occurrence in one text).

The Verse Series Matrix

If a verse contains several sentences or transformations of sentences, these will be called the subverses of the verse. Each verb-form marks the end of a subverse. In the vast majority of cases the end of a subverse is marked by a verb-form. The only exceptions are adverbial phrases, which if put behind the verb of the sentence they belong to, constitute a subverse of their own (cf. Holmer and Wassén 1963: 44).

Each subverse contains at least one verse section, the end of a subverse is always also the end of a verse section, but the reverse is not always true. Corresponding statements can be made about the beginnings of subverses and verse sections. Thus an upper limit for the number of subverses of a verse is given by the limitation of the number of verse sections of a verse.—In the same way as the verse sections shape the sound structure of the verse by means of repeatedly occurring sound figures the subverses shape its syntactic structure by means of repeatedly occurring syntactic figures, i.e., by means of parallel constructions. This is a strict analogy between the principle of construction of the phonological structure and that of the syntactic structure.

In a verse series matrix

$$(I) \quad \begin{array}{cccc} T_1^1, & T_2^1, & \dots, & T_{n_1}^1 \\ T_1^2, & T_2^2, & \dots, & T_{n_2}^2 \\ \cdot & \cdot & & \cdot \\ \cdot & \cdot & & \cdot \\ \cdot & \cdot & & \cdot \\ T_1^m, & T_2^m, & \dots, & T_{n_m}^m \end{array}$$

let T symbolise a subverse, n_i the number of T 's of a verse. Let i, j, k, l be arbitrary positive integers. Then the following subverses may be paralleled:

$$(II) \quad T_j^i \| T_{j+1}^i \| \dots \| T_{j+k}^i, \quad (n_i \geq j+k \geq 2)$$

$$(III) \quad T_j^i \| T_{j+1}^{i+1} \| \dots \| T_{j+l}^{i+l}, \quad \left(\begin{array}{cc} n_i & \geq 1 \\ \cdot & \cdot \\ \cdot & \cdot \\ \cdot & \cdot \\ n_{i+l} & \geq 1 \end{array} \right)$$

$$(IV) \quad T_{n_i}^i \| T_1^{i+1}$$

The rules of paralleling (II), (III), (IV) may also be simultaneously applied to the verse series matrix (I).

No general preferences of certain interpretations of the verse series matrix beyond the rules (II), (III), (IV) can be stated. Individual poets, however, prefer—at least for the composition of individual texts—certain types of interpretations. The poets of 1.1.5 and 1.1.7 a for example endeavour to interpret n_i with as high values as possible and to parallel as many subverses of a verse as possible, while the poet of 1.2.1 parallels as much as possible in a column and poets of origin texts (3.1) show a special preference for the composition of verse groups.—However, this is by no means definitive, for a subverse can be paralleled in different manners—also within one and the same text.

If $j+k=2$ applies in rule (II), we have a pair of subverses. If $n_i=1$, $l=1$, $n_{i+1}=1$ apply in (III), we have a pair of verses. If $n_i=1$, $n_{i+1}=2$ or $n_i=2$, $n_{i+1}=1$ apply in (IV), we have a parallelism between a verse and a subverse. These special cases constitute the minimal condition for the existence of parallelism in general. In the poetry of the Cuna—and in that of many other Indian tribes (cf. Walton and Waterman 1925)—they are border cases. In many literatures of the Old World, which are often built on binary principles, they determine the structure of parallelism in general (cf. Steinitz 1934; Jakobson 1965).

In the extreme case of (II) we have $j+k=n_i$; then all subverses of the verse are parallel. In the extreme case of (III) we have $i+l=m$; then each verse contains a subverse which is parallel to a subverse of its successor.

If in the last case the sound structure of the verse is altered by abandoning the principle of grouping subverses in verses, the subverses thus becoming complete verses, while leaving the parallel construction unchanged, an alternating parallelism is produced (cf. Walton and Waterman 1925: 41), i.e., the paralleled verses no longer follow one another immediately but at regular intervals. (This rule is an addition to (II), (III), and (IV)). This order can still be superposed by another if by means of (II) and (IV) some columns of the matrix are paralleled among each other.

The Structure of a Verse Group

If (III) is simultaneously applied to all columns of the verse series matrix and if then the extreme case of (III) occurs in all columns, a verse group is produced (def.). This is governed by complex rules, which need a separate discussion. For the sake of simplicity we also regard the alternating parallelism as constituting verse groups by considering the conversion of

subverses into verses as reversed. Also the minimal case ($n_i=1$) can form a verse group.

As in a verse group all verses are parallel, the relationship between subverses and verses may be left unconsidered. Instead, we now divide the verse into morphemes. (However, if in a paralleling chains of morphemes are substituted for morphemes, these chains must be chosen as units. But this case is rather unimportant and will not be considered in the following.)

If the verses of a verse group were written one below the other and morphemes then located one below the other grouped in columns, we would obtain columns with nothing but identical morphemes, and columns in which at least some morphemes would be different. The number and the order of the two types of columns would be determined only by the grammar, and need not be considered in this context. As the columns with identical morphemes are not subject to any further poetic rules, only the columns containing several morphemes of the same class are of interest in this context. These will be called variation series.

A verse group must contain at least one variation series. If it contains only one variation series, the members of this must all be different (i.e., identical verses are not allowed to follow one another).

But the situation becomes complex only when a verse group contains two or more variation series. It is sufficient to formulate the rules of composition only for the occurrence of two variation series, for all higher cases are very rare, built on the same principle, and almost without exception somewhat defect. Let V^1 be one of the two variation series, V^2 the other.

V^1 contains the morphemes $\{v_1^1, v_2^1, \dots, v_n^1\}$, V^2 contains the morphemes $\{v_1^2, v_2^2, \dots, v_n^2\}$ (i.e. the same number as V^1). In V^1 and V^2 resp. some morphemes are different and some are identical. Let $V'^1 = \{v_1'^1, \dots, v_{n_1}'^1\}$, $V'^2 = \{v_1'^2, \dots, v_{n_2}'^2\}$ be the two sets of different V 's. (Only in some cases $n_1 = n_2$ applies, but this is insignificant.) We conceive the morphemes of V'^1 and V'^2 as given in the same order as in V^1 and V^2 resp.

Now V^1 and V^2 can be generated from V'^1 and V'^2 by forming the set of all (different) coverings of V'^1 with V'^2 .

E.g. in the case $n_1=3$ and $n_2=2$ the covering set is:

$$\{v_1^1, v_1^2; v_1^1, v_2^2; v_2^1, v_2^2; v_2^1, v_1^2; v_3^1, v_1^2; v_3^1, v_2^2\},$$

or:

$$\{v_1^1, v_1^2; v_1^1, v_2^2; v_2^1, v_1^2; v_2^1, v_2^2; v_3^1, v_1^2; v_3^1, v_2^2\}.$$

In which of the two possible ways the covering set is to be ordered will be determined by the grammar and by the structure of the facts to be

described. The choice may also be an arbitrary one. In this context it is irrelevant.—When forming the covering set, it is also possible to leave out some of the ordered pairs. For $n_1=3$ and $n_2=2$ we therefore have $n \leq 6$.

In general:

$$n = \overline{\overline{(V'^1 | V'^2)'}}$$

where $\overline{\overline{(V'^1 | V'^2)'}}$ denotes the number of all (different) coverings of V'^1 with V'^2 that have been carried out.

In the maximal case we have

$$n = \overline{\overline{(V'^1 | V'^2)}} = n_1 \cdot n_2,$$

where $\overline{\overline{(V'^1 | V'^2)}}$ is the number of all logically possible (different) coverings of V'^1 with V'^2 .

If three variation series are used for the composition of a verse group, the covering set of the first two is covered with the third:

$$((V'^1 | V'^2) | V'^3).$$

But then we have

$$n = \overline{\overline{\overline{((V'^1 | V'^2) | V'^3)}}} < \overline{\overline{\overline{((V'^1 | V'^2) | V'^3)}}}.$$

However, this may hardly be seen as an intention of the poet, but rather as the inability to survey so large a composition. In general, three difficulties are encountered in the formation of verse groups: the construction tends to become difficult to survey (particularly since the Cuna poets do not write their verses one below the other but one after the other); the grammaticity of the verses must be maintained; all the verses must have a meaning which makes sense in the text as a whole.

These difficulties explain why some verse groups contain defective covering sets. That we unquestionably are dealing with errors in these cases follows from the fact that in the manuscripts in Cuna writing such errors have often been corrected subsequently (e.g. in 1.1.3 e). In addition, a very large part of the texts consists of error-free verse groups.

Thus

$$\overline{\overline{(V'^1 | V'^2)}} = n$$

with certainty is a maxim always aimed at in the composition of verse groups. This maxim can be stated as follows: from as few elements as possible as many verses as possible are to be composed, with the condition, however, that no two verses be identical.

The combination of the elements is to be regular.

Application of Birkhoff's Measure

On the basis of the maxim of the formation of verse groups a problem can be discussed rigorously, which in a less clear-cut form affects the entire parallelism, in fact the whole of Cuna literature. What is the connection between the principle of construction and the aesthetic effect?—The answer contains a partial explanation of the principle of construction itself.

Birkhoff has attempted to develop a measure of the aesthetic effect of works of art. He conceived this aesthetic measure of the formation of works of art (M) as a function of two variables, the complexity (C) and the order (O) (cf. Bense 1965: 320). While the purity of formation (M) increases with increasing order, it decreases with increasing complexity, so that we have

$$M = f(O, C) = \frac{O}{C}$$

which is called Birkhoff's quotient.

It should be noticed that M is always only a relative measure, i.e., that it can never evaluate a work of art in absolute terms, but only by way of comparison with others of the same class. How O and C are to be measured can also not be stated generally but depends on the situation in each case.

For the verse groups of Cuna literature we have an especially simple possibility of interpretation: C is determined by the set of elements used in the composition and O by the set of relations established between the elements used. If the comparison is confined to verse groups in which the columns with identical morphemes and the number of different morphemes in the variation series are equal, one may write

$$C = n_1 + n_2,$$

$$O = n$$

The aesthetic measure then is

$$M = \frac{n}{n_1 + n_2} = \frac{(V'^1 | V'^2)'}{n_1 + n_2}.$$

In the maximal case we have

$$M = \frac{n_1 \cdot n_2}{n_1 + n_2}.$$

Thus Birkhoff's quotient attains its highest value if and only if the maxim of the formation of verse groups, the Cuna poet's ideal of composition, is fulfilled.

This may also be formulated as follows: the Cuna poets endeavour to maximise Birkhoff's quotient (within a given system of rules).

This maxim also applies, though less rigorously, to the simpler forms of parallelism and to the entire Cuna poetry, for in these, too, as many order relations as possible are generated with as few elements as possible.

The fundamental principle of Cuna literature creates a high purity of formation. This is part of its explanation.

Compositions of Verse Series and their Semantic Structure

Verse series can be parallelised to other verse series, which, of course, implies that one or several new verse series which are not parallel to them must be inserted between them, for otherwise one would obtain one single verse series. Such verse series following one another at intervals may be called compositions of verse series. The composition of verse series is subject to the rules governing the formation of verse groups, regardless whether the individual verse series themselves are verse groups or not.

The possibilities of semantic relations between the members of compositions of verse series—as is in general the case with verse groups—are very limited: in any case we must have a—complete or incomplete—covering of a set of individuals with a set of predicates. The minimal case of this is a simple atom sentence, i.e., the combination of one single individual and one single predicate; the maximal case is the complete covering of n individuals with p predicates (or their negations), i.e. each of the individuals is either attributed, or not attributed, each of the predicates. The intermediate cases which can appear in the formation of verse groups—either if an individual is attributed all the predicates mentioned, or if all individuals mentioned are attributed one predicate—do not occur in the composition of verse series.

The verse series intervening between the verse series of a composition of verse series can form a composition of verse series among themselves. In most cases this will consist of identical members. In this way the same structure is produced as in the case where the subverses of a verse are not parallel among themselves, but to the subverses of the secondary verse. Thus, if one would write down horizontally the verses of interlacing compositions of verse series until the first verse series of each composition of verse series has been written down once, and then start again below the first verse until the second series of each composition has been written down, etc., all verses written below one another would be parallel, or identical,

and in each case some verses written one after another would be parallel but not identical, i.e. one would obtain the pattern of a verse group. Indeed, such structures give a monumental impression. They are by no means rare.

Examples of Verse Series

Examples of the verse series structure.

Examples of the formation of pairs of subverses:

Nakasailiki opatyekwichi/saili karyekwichi

(1.4.1: 264)

He lets down his noble hair/he unbinds his hair

Tarpa yolapa saila kannokemai/tarpa yolapa saila pu(la)lekemai

(1.4.1: 275)

The north wind blows hard/the north wind increases

Examples of the parallelisation of some subverses of a verse:

“Ana naila purwikan kwen pechuli/wini nokalekenai/wini

ululekenai/neka aknakwa neka pali.”

(1.1.5: 185)

“The little twigs, each one, open up into calabash-shaped fruits/they open up into pot-shaped fruits/towards sunrise.”

Example of the formation of pairs of verses:

Uukkamola naikkamola ulesuekwichi,

Uukkamola tapukkamola esuekwichi,

(1.4.1: 262, 263)

He takes off his shirt, his trousers,

he takes off his shirt, his white shirt.

Example of paralleling in columns of the verse series matrix:

Kanati peka purpalel tuloali/kanati peka purpalel akkaloali/

pel ipekala kun popiiye/pel apirkuna kwale.

Kanati peka nikakun okwichiali/kanati peka nikalel akkaloali/

pel ipekala kun po piiye/pel apirkuna kwale.

(1.1.5: 236, 237)

The medicine man gives you purpa/the medicine man transforms your purpa/all like copies/all like twin figures.

The medicine man plants nika in you/the medicine man transforms your nika/all like copies/all like twin figures.

Example of a combined application of rules (II) and (III) of paralleling in the verse series matrix:

Paniki nekatul aipanemai/paniki nekatulaselekemai

Paniki nekatula wawwanmakkemai/paniki nekatula imakkemai

(1.4.1: 62, 63)

In front of them the monsters move/in front of them the monsters swim
In front of them the monsters move back and forth/in front of them the
monsters make noise.

Example of alternating parallelism:

Neka alikunneka pali/nek alikunneka pali

Paro tula imakkemai,

Neka alikunneka pali,

Suppisuppi neka tula imakkemai,

Neka alikunneka pali.

etc.

(3.2.2.4 a)

Over the vast expanse of the earth, over the vast expanse of the earth
the paro-bird sings,
over the vast expanse of the earth,
the suppisuppi-bird livens the earth with song,
over the vast expanse of the earth,
etc.

(If the verses are arranged pairwise as subverses of new verses, one obtains a
verse group with a variation series.)

Example of the application of rule (IV) of paralleling in the verse series
matrix:

Nekati napase nakkwenae/uukamola naikkamola yoasakwichi,

Uukkamola tapukkamola yoasakwichi

(1.4.1: 268, 269)

He climbs onto the bank/he puts on his shirt, his trousers,

he puts on his shirt, his white shirt

(Two sentences which are parallel to the subverses parallelised here appear
in 1.4.1: 262, 263 as a pair of verses.)

Examples of verse groups:

(Here we have to choose especially simple examples, for the more complicated ones are of course very long. They can be found in abundance in
1.1.6, 1.1.3, 1.2.1, 3.1.)

Yalakitolakan arkwaneta inakamitiliyaikan arkwaneta

Yalakitolakan arkwaneta inakamitilisopikan arkwaneta

Yalakitolakan arkwaneta ikwatiliyaikan arkwaneta

Yalakitolakan arkwaneta ikwatilisopikan arkwaneta

Yalakitolakan arkwaneta nakitiliyaikan arkwaneta

Yalakitolakan arkwaneta nakitilisopikan arkwaneta
 Yalakitolakan arkwaneta nekartiliyaikan arkwaneta
 Yalakitolakan arkwaneta nekartilisopikan arkwaneta
 Yalakitolakan arkwaneta inakwamakaliyaikan arkwaneta
 Yalakitolakan arkwaneta inakwamakalisopikan arkwaneta
 etc.

(1.1.6 a, S. 608)

The mountain people descend, the X-girls descend
 (Only the names of the girls are substituted in the verses. These are so
 chosen and arranged that a defective covering set is formed.)

Inapisepatili oloulu tulaleali
 Inapisepatili oloulu tulalemai
 Inapisepatili oloulu kiklimakkali
 Inapisepatili oloulu kiklimakmai
 Inapisepatili oloulu wawanmakkali
 Inapisepatili oloulu wawanmakmai
 Inapisepatili oloulu sikkirmakkali
 Inapisepatili oloulu sikkirmakmai
 Inapisepatili oloulu aituttumakkali
 Inapisepatili oloulu aituttumakmai
 Inapisepatili oloulu kollomakkali
 Inapisepatili oloulu kollomakmai
 Inapisepatili oloulu imakkemai

(3.2.1.14, S. 613)

The girl, the pisepa-plant, in the golden box, begins to liven up,
 the girl, the pisepa-plant, in the golden box, livens up,
 the girl, the pisepa-plant, in the golden box, begins to move,
 the girl, the pisepa-plant, in the golden box, moves
 (etc. — The following verses mean: to tremble, to swing, to swell, to sound.
 One notes that in this case a series of verbs is covered with a series of
 auxiliari verbs, thus describing an event in full detail.)

3. ASPECTS OF THE MACROSTRUCTURE

Cuna Literature as a Succession of Pictures

A Cuna text is like a film: only in dialogues is action reported: apart from
 that it becomes visible only in the form of pictures and successions of
 pictures, in descriptions of the exterior side of objects and men, of their

relations in space, and of the change of their relations in time. Thoughts and feelings are not mentioned but translated into pictures. Dispair is not mentioned, but a storm is described, the weeping, the tears of those despaired. It is not mentioned that someone is happy; pictures of blooming flowers, of brilliant things appear. Emotional processes are transferred to and translated into processes in the outside world. In this way a succession of pictures results, which does not describe a process but makes it transparent. One is not told what actually happens. One must "read" the events in the uninterrupted succession of pictures. One has to decipher a film.

On the one hand this increases the effect of the symbols, on the other hand it causes a limitation of the types of means of expression. The smaller the number of such types the poet is allowed to use, the more skill he must (and can) apply to these few types.

The limitation to small numbers and the creation of many relations: that is the principle of construction of Cuna literature.

On the Analysis of the Macrostructure

The investigations of Parry and Lord (see especially Lord 1965) have proven formula and theme to be the most essential feature of the technique of composition of oral verse epics. The Cuna poet uses very similar means in the composition of his texts. But these differ from the formula/theme-technique both in form and function, and cannot be explained by Lords hypotheses, if only for that reason that we are dealing with a written literature. As regards the sound structure the "formulas" and the "themes" of the Cuna can be treated rather freely as Cuna literature is not metrically bound. The rules governing the arrangement of the "formulas" and of the "themes" in particular, i.e. the mechanism of repetition and variation, are so complicated that this method of treating formula and theme hardly facilitates the poets work.

The applicability of concept and theory of formula and theme to the Cuna literature is limited. A sharper model must be developed for it.

The arrangement of the pictures is governed by the same principle of construction as determines the arrangements of the phonological and syntactic figures: the formation of n -tupels of equivalent but generally not identical figures, the establishment of as many relations as possible between as few elements as possible.

The arrangement of the contents, the structure produced by the relations between elements of the content and classes of such elements can be called

macrostructure (cf. Bierwisch 1965: 63). While it is relatively easy to analyse the microstructure by means of simple rules of substitution, the analysis of the macrostructure quite generally meets with enormous difficulties. Hitherto it is completely unclear what may be regarded as an element of the macrostructure. While e.g. Fischer (1963: 249) regards the "minimal sentence" as the smallest constituting element of the macrostructure (he probably means atom sentences, i.e. combinations of one individual and one predicate), Dundes, for example, based on Propp and following Pike (Fischer 1963: 276; Dundes 1964), considers the "motifeme" to be the constituting element. Possibly an intermediate solution is that a motifeme can be paraphrased by one single atom sentence, or by a molecular sentence structured in a certain manner.—In the case of Cuna literature, however, the minimal elements of the macrostructure can be derived with sufficient accuracy from the elements of the microstructure, a method approaching to a certain extent the intermediate solution just mentioned. In one respect this is a direct reversion of Dundes's point of view: while Dundes decidedly maintains that microstructure and macrostructure are mutually independent (e.g. Dundes 1964: 49), in the present approach the macrostructure is developed from the very microstructure. Of course the analysis might also proceed from the macrostructure to the microstructure. Nevertheless we do not assert that macrostructure and microstructure are determined by one another, but there are very definite correlations between them (cf. also Bierwisch 1965: 63). It is these very correlations which must be detected. As already mentioned, the method to be applied is that of discourse analysis.

Actemes

The three genres of Cuna literature, epics, historical-political poetry, and simple texts, differ in their macrostructures. Simple texts consist of only one sceneme; the macrostructure of historical-political texts shows the same principle of construction as that of the epics, the interpretations of the respective macrostructures, however, being qualitatively different: the plots of the historical-political poetry correspond to the pictures of the epics. In order not to blur this difference the elements of the respective macrostructures will be given different names.—In the following we shall develop but only insofar as the terminology is concerned, only the macrostructure of the epics (and of the simple texts, which are a simple special case). To what extent the macrostructure of the historical-political poetry differs from this will be discussed later.

All mutually parallel sentences, between which homogeneous semantic relations exist, with the exception of the causal and the temporal-parallel ones, can be paraphrased by a molecular sentence, connecting a number of individuals and a number of predicates, the individuals (*inter se*) and the predicates (*inter se*) being semantically equivalent, i.e. having equivalent semantic markers (according to the semantic theory of Katz and Fodor 1963). Semantically homogeneous parallel sentences thus possess a paraphrase connecting an (intensionally defined) class of individuals and an (intensionally defined) class of predicates. Linguistically speaking, such a paraphrase consists of a (complex) noun phrase and a (complex) verb phrase. The content of this paraphrase represents the minimal constituting element of the macrostructure and will be called *acteme*. A realisation of an *acteme* is called an *act*, and is the content of one single semantically homogeneous verse series. The acts of an *acteme* vary only insofar as the individual atom sentences expressing an act do not necessarily appear in the same order for all acts of an *acteme*, as the mutually correspondent atom sentences are not necessarily identical—but necessarily synonymous—and as not all acts of an *acteme* must be expressed by the same number of atom sentences, i.e. for different acts of an *acteme* partly the same, partly different individuals and predicates may be chosen from the class of individuals and the class of predicates. (By the term “act” we do not necessarily mean something dynamic; an act may also be static, i.e. it may consist of an action or of a state).

An act rarely occurs more than once in a text, but almost all *actemes* are repeated one or several times in a text.

The linguistic representations of all acts of an *acteme* are equivalent in Cuna literature, i.e. identical or similar actions or states are expressed by identical or similar sentences. (This corresponds to the formula technique of oral verse epics.)

Thus, for example, the act of three brothers stepping into a boat is described in three completely different passages of 1.4.1 as follows:

The boys step into the boat,
the younger brothers step into it.

(1.4.1: 24, 25)

The boy Inatoippiler steps into the canoe,
the boy Oloyakinyalele steps into the canoe,
the boy Naluokinyapippiler steps into the canoe.

(1.4.1: 315, 316, 317)

The boy Inatoippiler steps into it,

the boy Oloyakinyaler steps into it,
 the boy Naluokinyapippiler steps into it.
 (1.4.1: 936, 937, 938)

The semantic relations between the acts of an acteme within one text are in principle the same as those between parallel sentences in general. However, all these acts are separated from one another in time and in space. In this sense they are temporal-parallel.

The members of causal-parallel verse series can be regarded as individual acts, for the facts described are mutually independent, and the only (implicit) causal relationship between them is due to the fact that they are mentioned one after another. In other positions there need not exist a causal relationship between them, or between them and other sentences.

As already mentioned, in temporal verse series an act is divided into subacts; for the macrostructure these subacts are irrelevant, for they cannot occur isolated from other subacts: a subact cannot become an act. Thus, for example, the subact
 The old woman touches the ground with her foot
 (1.1.5: 12)

cannot be conceived of as isolated, but only as part of the acteme "to go".—The subacts produced by a mere change of the tense of the verb do not completely fit into this pattern, for each of these tenses may also occur separately. If they occur separately, they are regarded as acts, if they occur in conjunction with other tenses, they form subacts.

Scenemes

The next highest unit of the macrostructure, the sceneme, with its realisations, the scenes, can be defined in two ways. Like the acteme it can be developed on the basis of its microstructure, and on the basis of its distribution over texts and textemes.

If the texts of one or several textemes are compared, it is possible to find contingents of actemes, i.e. groups of actemes which always appear jointly, or of which at least some appear jointly. These constitute a sceneme. The realisation of a sceneme, the scene, consists of the acts of all or some actemes of a contingent.

A scene consists of n acts, which belong to n' actemes, n' being less than or equal to n ; some actemes may appear several times in one scene. If in this case some or all of the repeatedly occurring actemes have the same realisations, some acts occur repeatedly. As the acts of one acteme are all

mutually parallel and expressed by identical or parallel verse series, some verse series occur repeatedly in one scene or are mutually parallel. Only if compositions of verse series are combined, is this paralleling of verse series subject to definitive rules, viz., to those of the formation of verse groups. In all other cases it may take place in arbitrary positions of the scene. Thus, if the verse series matrix is to be valid for the length of one scene, arbitrary subverses may be paralleled in this matrix, and the rules of the paralleling (II), (III), (IV) apply only to neighbouring subverses, i.e. to segments of the matrix.

This fact now allows a definition of the scene, developed from the micro-structure: a passage throughout which parallel subverse can be found at regular intervals constitutes a scene. This definition is furthermore supported by the fact that at the beginning and the end of a scene one frequently finds non-parallel verses. Equivalent scenes then constitute a sceneme.—However, it is expedient to define the sceneme also on the basis of its distribution, for one finds actemes which occur in more than one sceneme, so that the criterion of paralleling does not always hold good.

The transitions between scenes often are not abrupt but fluid. Occasionally it may be dubious whether an act is to be considered part of the first or of the second scene. For the time being, we may start from the assumption that such fluid transitions are clearly intended. Only a very detailed investigation could reveal whether a dubious acteme is part of a neighbouring sceneme (and of which), or whether it is used regularly as a transition between completely different scenes.

Another difficulty in distinguishing actemes and scenemes results from the fact that an acteme may have a realisation (act) which is a scene. An action which sometimes appears as a simple act may occasionally be adorned with so many details, i.e. be built of constituting acts, that a scene results. Conversely: the description of a scene may be so concise that merely one fact is mentioned. Consequently actemes and scenemes are not absolute but relative units. Whether something is an acteme or a sceneme is not determined by the action as such, but by the manner in which it is narrated.

This property of the macrostructure may be compared with a property of the syntactic structure of sentences as represented by generative grammar: a noun and a verb phrase can in one case be a very high constituent in a given syntactic marker, and in another case a lower constituent in the same or another marker. In the same way an action can provide in one case an act in a scene, and in another a scene composed of other acts.

Textemes

A series of scenes constitutes a text. Similar series of similar scenes, i.e. similar series of scenemes, constitute a texteme. A text is a realisation of a texteme.—The texts of one texteme differ insofar as the scenemes constituting the individual texts do not necessarily have the same realisations (scenes), as they appear in different orders, and as one text may contain some scenemes which do not occur in another. The most important scenemes of a given texteme, however, must occur in all texts of this texteme. (They might be called the kernel of the texteme).

The Cuna poet makes allowance of this condition by giving the same title to all texts of one texteme. All texts of one texteme are realisations of the same text idea.

A text consists of n scenes, belonging to n' scenemes, n' being less than or equal to n . Some scenemes may occur repeatedly in one text. But in this case they all have different realisations; a repetition of scenes cannot be found. The realisations of one sceneme in one text may differ extremely (subject to the rules already mentioned).

The arrangement of the scenemes in a text is not governed by general rules of a mechanical nature, but is determined by the action as narrated, by the plot. It is an expression of the plot. But for this very reason remarkable irregularities occur. Thus the initial and the final scenes of one text are frequently realisations of the same sceneme, a fact which is of deep significance for the overall effect of a text. The types of arrangement of scenemes, however, are specific for groups of textemes, for genres. With this we have reached the point at which no further general statements on the structure of the Cuna poetry are possible. At the same time this is the level of analysis at which only few objects are available, the genres. These can be discussed individually.

One notes the analogy between the principle of construction of the macro-structure of the Cuna literature and the formula/theme-technique of oral verse epics: the acteme corresponds to the formula (cf. Lord 1965: 30 seq.), the sceneme corresponds to the theme (cf. Lord 1965: 68 seq.); the relation of text and texteme correspond to that of "songs" and the "song" (cf. Lord 1965: 99 seq.). But this is only an abstract analogy. The principles of construction are fundamentally different; that of oral verse epics creates a statistical order, that of the written Cuna literature a mechanical one.

4. POETIC EXPRESSIONS, METAPHORS, SYMBOLS

Secondary Semiological Systems

The phonological structure and the syntactic discourse structure of poetic texts and of colloquial discourses differ extremely, whereas the syntactic sentence structures of the two types of discourses differ only insofar as the set of admissible sentence structures in poetic texts is a genuine subset of the whole set of sentence structures. At the semantic level, differences occur with all relevant types of segments, with words, sentences, and macro-segments, either because the final chains of the syntactic markers are given different interpretations, or because the colloquial meanings of the segments become expressions in a new, secondary semiological system. The former applies to segments of word length, the latter to all larger segments.

Words that do not appear in the lexicon of the colloquial language are called poetic expressions. Segments of the length of a sentence or a verse series which in poetic texts denote something other than in colloquial language are called metaphors. Segments of the length of one or several scenemes, which refer to something other than one would assume, are called symbols.

Poetic expressions appear in all genres; the use of metaphors is mainly restricted to historical-political poetry; symbols are a specific feature of epics. For those ignorant of certain poetic expressions and metaphors, the Cuna translate them into colloquial language. Symbols are not interpreted. Their effectiveness can be explained from their property of being symbols.

In order to make visible the special quality of the metaphors and symbols a general theory of secondary semiological systems is required, which admittedly may be a mere reproduction of the general theory of semiological systems. With precursors in scholasticism such a theory has first been set up by Saussure (1915), followed by others, and probably has received its most rigorous precision from Hjelmslev (1943). On this theory is based most of what today in Europe (above all in France) goes by the name of structuralism (Mukařovský, Lévi-Strauss, Barthes, etc.)—in contrast to American structuralism, in which (at least insofar as influenced by linguistics), since Bloomfield at the latest, semiology hardly plays any part (including recent developments).—The theory of semiological systems has been developed for the science of literature in the first place by Mukařovský (1948); to that which we here call symbol (and which is called “myth”

there) it has been applied by Lévi-Strauss and those who have followed him, most clearly perhaps by Barthes (1964: 85 seq.).

A semiological system consists of three parts: a designans, a designatum, and the relation between the two, the sign. The sign can become the point of departure of a secondary semiological system. It then is the designans and called form in this secondary system. In addition there is a designans, the concept, and the relation between form and concept, the meaning. Thus we have the following correspondences: designans—form, designatum—concept, sign—meaning. Sign and form are different functions of one and the same thing in the two different systems (cf. Barthes 1964: 93 seq.).—In the present case the primary system is the language, the secondary, say, the symbol. Example: (house) is a sequence of four phonemes, a designans; the designatum is a house, “house” is the sign. If a secondary semiological system is superimposed, the sign “house” becomes a designans in the secondary system, i.e. a form; the designatum, i.e. the concept, is (say) security, the symbol itself is the meaning. Admittedly, in the system I have to use here to make myself understood, i.e. the language, concept and meaning of the symbol system can be expressed only approximately. Many pages might be written on the house as a symbol: in each individual case it means something different, in each individual case the structure of its meaning is different.

The same applies to metaphors, which can be translated. Metaphors are symbols which are transparent and rational. They do not hide anything and they lack the twofold dimension (Barthes 1964: 110 seq.) of the symbols.

These theoretical explanations are indispensable if misunderstandings are to be avoided. They can contribute but little to promote the empirical aspects of analysis. This would require a fully developed semantic theory which would enable us to give precise descriptions of at least the forms of the secondary semiological system. The absence of such a theory explains why the structuralism of Lévi-Strauss and others has been so unfruitful in the empirical analysis of the “myths”.—It is obvious that the traditional methods are no less successful.

Most epics (and only epics) are symbols or consist mainly of symbols. (Barthes would say that the Cuna epics are “myths”.) Thus symbols are specific for genres. If we want to understand them we have to consider social and mental conditions; they have to be seen in their environments (contextemes). Therefore they must be discussed not in the general part of the theory of Cuna poetry but in connection with the genre in its context.

Poetic Expressions

Poetic expressions are frequently used in Cuna literature, and they are conventionalised to a large extent (cf. Marshall 1950: 83; Stout 1947 b: 9 seq.). In no case must the colloquial equivalent of a poetic expression be used in a poetic text. Conversely, poetic expressions are in most cases not used in colloquial language, in particular as they often do not belong to the active vocabulary of the normal, poetically uneducated Cuna; in many cases not even to his passive vocabulary. They are interpreted to the audience by *arkalas*.—The *arkalas* have received a special education enabling them to interpret literature (however, only the historical-political poetry) for the people, to decipher for them the poetic expressions and metaphors (cf. Wassén 1949: 48; Marshall 1950: 185). This has led many observers to regard the poetic language of the Cuna as a language different from that they normally use (not as a special dialect, which might perhaps be justified), which is only understood by specially educated people (Graetz 1958; Keeler 1957: 16; Stout 1947 b: 9 seq.). According to this conception it would be correct and justified to represent the poetic expressions as constituents of a separate lexicon. But this approach would ignore that the aesthetic effect of the poetry is largely due to the difference between poetic and colloquial language. For this reason the poetic expressions must be derived from the lexicon of the colloquial language by means of semantic rules of transformation. These rules of transformation can only have the form of simple rules of substitution, allowing, however, entire classes of words to be transformed by one single rule.

As all plants and animals are anthropomorphised in literature, plants becoming female, animals, as a rule, becoming men or women, according to their biological sex, to all names of plants the (prefixed) morpheme “*puna (waka)*” (girl, woman), to all names of animals “*machi*” (boy), “*ay*” (friend), “*kilu*” (uncle), “*ipe*” (master), or “*puna*”, and one of the usual endings of male or female proper names are added. Poetic expressions for individual objects are frequently produced by way of association. Thus e.g. the word *kana*, chair, becomes “*kana*”, medicine-singer, for the latter sits on a chair during his work. (On the other hand the colloquial expression for a medicine singer is *inatuleti*.) The word “*innaipe*”, the poetic expression for *tule* (man), which literally means “owner of the *chicha*”, denotes a *diferentium specificum* of the human race, which is used as a collective noun. Some poetic expressions are derived from “myths”, e.g. “*koe-kae*”, to “catch a stag”, for to bear a child. Behind this there is the fairy-tale, that the father has taken the child from a stag in the forest (Nordenskiöld

1938: 370; Gassó 1912: 206).—Most of these derivations are probably of a purely ethymological nature and do not have any synchronic relevance, for the poetic expressions are conventionalised to a large extent.

This applies all the more to another, rather large group of poetic expressions, the archaisms, for which no synchronic derivation is possible. Thus, for example, the poetic expression for arkan, hands, is “arkanakwa”, that for “tuttu”, flower, is “tutu”, etc. That these words are archaic expressions follows from the fact that they are still in use in archaic dialects, e.g. in that of Rio Caimán, or in cognate languages like the Kaggaba language. (Holmer 1951: 78.)

Some of these archaisms may also be considered as phonological or morphological peculiarities of the poetic language; for, diachronically, they do not differ from their colloquial counterparts.

As most of the texts recited today have been passed on from ancient times, the archaisms need only be considered as such, if a rigorously synchronic description of the present poetry is aimed at. When the respective texts were composed, these words probably were not regarded as archaic expressions.—Unfortunately, it is impossible to find out whether archaisms are used in texts composed recently.

Metaphors

A metaphor is the consciously performed and consciously understood “transference of a name from the thing which it properly denotes to some other thing” (Aristotele, *Poetics*, Chap. 21.). This definition is in general use still today (cf. Wheelwright 1965: 158). For the Cuna literature it is insufficient only insofar as in the formation of metaphors an object generally is not only given the name of another object, but also the (potential) properties of the latter; the linguistic unit in which a metaphor is expressed is not the word, but the sentence. Facts, not objects, are understood metaphorically.

For this reason also the metaphors are subject to the rules of expansion of the Cuna literature; by means of paralleling the metaphor expressed in a sentence can be so expanded that it is expressed in a verse series. E.g. the transfer of the meaning of “tutu”, flower, to “woman” occurs frequently. This may be expanded into the metaphor: “the flowers blossom and wither”. This metaphor, in turn, in 1.4.1: 508–557 is expanded into a composition of verse series consisting of 49 verses by means of enumerating or temporal parallelism. This occurs in a passage which one might in fact regard as a

description of flowers. Moreover the text, of course, does not tell us that we are dealing with a comparison, and thus the flow of pictures remains uninterrupted. The metaphoric sense must therefore be interpreted into the text. As in principle any metaphor in any position can be expanded into an act, the distinction between pictures and metaphors, which is encountered in the general theory of poetry, does not make sense in the case of Cuna literature. What might be regarded as a "picture", in non-expanded state appears as a "simple" metaphor, and vice versa. One might also say that "pictures" are developed from metaphors.

Under these conditions a metaphor is difficult to recognize as such. However, it is easier for the Cuna to understand metaphors, for he is permanently confronted with metaphors and metaphoric figures of speech, for also in the colloquial language numerous metaphors are used (Puig 1948: 28). However, this gives rise to a certain difficulty in the description of the poetic language, for the specific features of the latter are defined as deviations from the colloquial language, so that we may ask whether the metaphors are a specific feature of the literature or not. This problem can be solved in the same way as for instance Jakobson (1960: 359) did in an analogous case. The metaphor is part of the poetic function of the language, not exclusively of poetry (cf. Wellek and Warren 1963: 173). The Cuna who uses metaphors in the colloquial language makes use of the poetic function of the language, but does not compose poetry.

In spite of the familiarity with metaphors, which we have stated, at least for the young Cuna and the women, a part of the metaphors remains unintelligible, in particular if a text is made up entirely or at least predominantly of metaphors. For this reason the texts of this type, after their recitation, are interpreted to the audience by the *arkalas*. It is the works of the *arkalas*—of which, unfortunately, only a few have been handed down to us—which give us an insight into the comprehensive and complex world of metaphors of Cuna poetry. And it is also only their work which shows that the expressions dealt with here are consciously perceived and transparent metaphors.

Metaphors are used for that which is tabooed in everyday life (cf. Nordenskiöld 1938: 37 seq.), that which one does not speak about, at least not to certain people: that which is connected with sexual matters (cf. Stout 1947 a: 38) or killing (cf. Nordenskiöld 1938: 375). In the first category there are primarily sexual organs, sex life, pregnancy and birth, to a lesser extent also expressions for woman, child, etc., which are, however, neither tabooed nor metaphorised in the colloquial language. (On the other hand, in the

colloquial language words—e.g. names of persons, which are in most cases replaced by kinship terms or by secondary names (Stout 1947 a: 27)—are tabooed, which in the poetic language are uttered without scruples.) Hunting, war, revolution fall into the second category.

Examples of the first complex are encountered above all in the *saila ikalas*, the texts on the origin of things (3.1.), how the god had sexual intercourse with the first woman, which then gave birth to the different things. In all these texts, for example, “soul” means menstruation “table” lap, “white cloth” the skin of the female sexual organs, “box” the uterus, etc. (cf. Nordenskiöld 1938: 374).

As hunting hardly occurs as an action in the poetic texts, the metaphors related to it mainly occur in the colloquial language. Their manifest function then is to avoid a warning of the animals; if the plan to go hunting were spoken of in unambiguous expressions, the game might dream of this and hide. If metaphors are used, the game does not understand (Nordenskiöld 1938: 375).

But the metaphorisation of war and revolution plays a very fundamental part in the literature, in historical texts. Thus a story from the 18th century says: “As already in former times pelicans and wild birds invaded our territory and dirtied it. One day they will come again and dirty it again. Then we shall make the rivers overflow their banks and we shall wash away the dirt of the wild birds.” (2.1.0.3, p. 201)

This means that foreigners invaded the territory of the Cuna, that they were driven away but will return, that then a revolutionary war will once more drive them away. Such metaphors can also be used in the construction of the plot itself; the poet can use the metaphor not only as a means of expression, he can also assign to it a role of its own in his story. For example, before narrating how the French were annihilated on Cuna territory (in the middle of the 18th century) (cf. Arevalo 1892: 259) he tells us of a singer visiting the villages occupied by the French:

“He sang as follows: One day you will see a great whirlwind, a great earthquake, great rainfalls and thunder over your villages. They did not know what Tata Morkolo meant . . .” (2.1.0.3, p. 199)

“Whirlwind” and “earthquake” are metaphors for war; “rainfalls” for arrows, “thunder” for the sound of flying arrows.

For the explanation of the genesis of the metaphors of Cuna literature the old theory due to Quintilian, which considers the metaphors to be the result of comparisons, is quite sufficient (Kayser 1964: 123). For example the last metaphor could readily be reformulated as a comparison: “War

will come like a whirlwind", etc. The tertium comparationis is always clearly recognizable. War is as stormy (here we are using a similar metaphor ourselves) and devastating as a whirlwind; as the wild birds dirty the country the foreign invaders dirty it, and as the river, when overflowing its banks, cleans the country the war will clean it of the invaders, etc.

In most cases a tertium comparationis can bring into relation to one another more than two facts. If in this case two or more facts are compared with a third one, a homonymous metaphor is generated. Thus a storm can be a metaphor for war, but it may also mean emotional unrest. If conversely one fact is compared with two or more others, synonymous metaphors are generated. Thus war may be metaphorised by "whirlwind", "earthquake, inundation" and the like, woman by "flower" or "chicken", etc. Obviously no restriction of homonymity and synonymity of metaphors by means of conventionalisation has taken place in Cuna poetry. In most cases the meaning of the metaphors is made unambiguous by the context. Synonymous metaphors can be of great use in the parallelisation of "simple" metaphors; homonymous metaphors, on the other hand, must have the effect of intensified metaphors: if, for instance, emotional unrest is described as a storm, there may be a simultaneous undertone of the more frequently used metaphor "war", so that the real content is at the same time brought into relation to two other metaphors.

5. MARGIN AND WRITING

Minimal Texts, Maximal Texts

The poetic rules determine the general properties of poetic texts. All of these rules have a similar form; they determine the arrangement of equivalent elements in structured n -tupels. The rules are equivalent at the phonological and syntactic levels: they determine the repetition of a figure in two dimensions, viz., the arrangement of pitch sequences in verse sections, and that of verse sections in verses, resp. the arrangement of subverses in verses, and that of verses in verse series. An extraordinary minimal case occurs in both instances, and in both dimensions, if an element occurs only once. This can occur only in special positions in the text. The usual minimal case is in both instances one repetition of an element in at least one dimension, maximal cases in both instances are caused by requirements of a non-literary nature: by the limited possibilities of the language, the requirements of the plot, the limitation of human short-time memory.

The limitations of the rules of the formation of verse groups are of a somewhat different nature. A simple minimal case arises if only one variation series with only two elements is used. If for reasons due to ritual, magic, or religion several objects or properties of one class must be enumerated, this can only be done by treating the objects or properties as elements constituting a variation series of a verse group. A minimal case then occurs if each of the elements enumerated occurs in only one subverse, and if no other subverses are inserted.

For the construction of covering sets at least two variation series are necessary, each of which must contain at least two different elements. The maximal case arises if all logically possible coverings of the variation series are carried out. Starting from this, complex structures may be established in two further directions: first, the subverses constituting the verses of a verse group can form a verse group themselves; second, two or more verse groups can form a composition of verse series. Again both expansions reach their maximal case if all logically possible coverings are carried out, their minimal case is reached if at least two elements of at least two sets are combined (that this may also be a maximal case is irrelevant).

As regards the third type of rules, i.e. those governing the arrangement of the actemes and scenemes, the minimal and the maximal case are determined by the requirements of the plot, a scene necessarily consisting of at least two actemes.

With all three types of rules there is a margin between minimal and maximal cases, which will be called context-free margin.—All those properties of texts located at the lower boundary of the margin, i.e. those constituting minimal cases are obligatory; all those located inside the margin are optional. A text consisting of nothing but minimal cases can be called minimal text, one consisting of nothing but maximal cases can be called maximal text. Among the texts investigated there is neither a minimal, nor a maximal text (however, this may be coincidence). Thus all texts are located within the margin. Minimal and maximal texts are, so to speak, borderline cases for the realisation of a texteme. Now in this context-free margin a simple maxim applies, viz. the establishment of a maximal text. That the maxim is never realised is due to the simple reason that in reality the margin is not context-free. When reciting a text, the poet has to adjust himself to the context, when accompanying a ceremony, to its speed, when reciting a therapeutic text, to the clinical particularities of the individual case, when reciting an entertainment text, to the interest the audience shows in the stories he tells, etc. (The tendency to adjust a text

to a context becomes particularly clear, if a singer is asked by a research worker to recite a text for (say) a wax cylinder recording, for he then (spontaneously) tries to get the whole text on one cylinder (Densmore 1926: 5.) This limits the context-free margin and prevents the establishment of a maximal text. On the other hand, this shows the fundamental function of the optional rules of the *p*-theory: they make it possible for the singer to adjust his text to the context. A numerical determination of the *n*-tuples of equivalent elements is in principle not possible (or not necessary) because all contexts of a contexteme differ, and require completely different interpretations (cf. de Smidt 1948: 8).

In the margin thus limited by the context, apart from the maxim to establish a maximal text, no further restriction applies. However, this leaves open a sufficient number of possibilities for different realisations of one texteme, e.g. in the selection from a series of synonymous sentences, in the choice of the dimension in which an expansion of a figure is to take place, in the selection and order of the actemes and scenemes, or in the selection of a metaphor from a series of synonymous metaphors. In fact, the realisations of one texteme vary within the margin, even if they are carried out by one and the same singer and follow one another immediately, and are so short that the deviations cannot be explained by means of difficulties in memorisation (cf. Densmore 1926: 4; 2.1.0.2). Densmore (1926: 3), who already noted the deviations of different realisations of one texteme (exterior conditions remaining equal), interviewed a singer on this matter, who answered that he did not intend "to sing a song always the same". Consequently the variation in the margin which depends on the context is aesthetically irrelevant.

Thus the aesthetically relevant features of a text are covered completely by the obligatory and optional rules of the *p*-theory. What is not covered are the imponderables, which make an essential contribution to the quality of a poetic text. The study of these imponderables is not possible and not necessary in the framework of a *p*-theory. Their analysis must remain the task of a hermeneutical analysis, which chooses as its objects individual texts, not an entire literature.

Literature-Writing

Some properties of a poetic text are determined by the properties of its generating mechanism, i.e. grammar and *p*-theory. The properties determined by the *p*-theory will be called (poetically) redundant according

to the general definition, which is different from that used in information theory (cf. Cherry 1963: 367). Though in an unprecise manner, the texteme determines the sequence of the scenemes, the sceneme the sequence of the actemes, the acteme a proposition. This proposition can be expressed by a sentence from a class of synonymous sentences, the words of which must all belong to the poetically transformed lexicon, and the syntax of which must meet the poetic requirements. The selection of this sentence takes place within the margin and is aesthetically irrelevant. The phonological component of the *p*-theory assigns a pitch sequence to the sentence. The sentence is parallelised according to the rules governing the arrangement of syntactic figures, the *p*-theory determining the properties of the verse series partly in an obligatory, partly in an optional manner, with the exception of the substituted elements of non-sequential verse series. Further pitch sequences are assigned according to maxims. Therefore the only part of the text which is neither redundant, nor irrelevant consists of the substituted elements of non-sequential variation series. Exactly these are the minimum of what is noted in the Cuna writing.

Thus the basic principle of Cuna writing is the renunciation of the notation of irrelevant or redundant text components. The notation of redundant components can be dispensed with, for these can be inferred immediately from the rules of the *p*-theory, and it is not desirable, for they have to be formed in different ways according to the given context. The notation of irrelevant components is not necessary, for these can be formed in arbitrary manner, and it is not desirable, for, according to a norm (Densmore 1926: 3), their formation should be different in each context (avoidance of exact repetitions).

The reconstruction of redundant or irrelevant components can present no great difficulty for the Cuna writer, because he has completely internalised the *p*-theory—in about the same way in which the speaker of a language has internalised the grammar of this language, and in general uses it without hesitation. The writer's ability of reconstruction is further increased by the fact that he learns the rules of the writing system together with those of the *p*-theory. All recitations of a written text, insofar as its redundant and irrelevant features are concerned, are different; the "kernel" remains always the same (cf. Reverte 1961: 110). Thus two levels of the variation of the texts of one texteme can be distinguished: the different ways of writing a texteme, which are mainly based on different traditions developed in the different schools of writing and poetry (cf. Kramer 1967 a: 580 seq.); the different recitations of a written text. These two levels,

however, differ only gradually and do not have any theoretical importance: in both cases a texteme is realised in different ways, in accordance with the rules of the *p*-theory.

Apart from the minimal notation, the writer can introduce redundancy into his manuscripts: the constituents of sequential variation series, some morphemes of the verse constant or the subverse constant. Finally he can notate each morpheme of the verse.—The necessity to make morphemes the unit of notation, and not, as one might be inclined to think, words or syllables, follows from the fact that the morphemes are the relevant elements of the poetic microstructure which is to be noted, and that the boundaries of morphemes do not necessarily coincide either with those of words, or with those of syllables. As morphemes are represented by sequences of phonemes, it does not, however, follow from this that the Cuna writing is a conceptual writing. Those parts of linguistic utterances which are actually noted are in fact represented in the manner of phoneme writings (cf. Kramer 1967 a). Terms like “picture writing” or “pictography”, which are again and again used for the Cuna writing, based on undefinable associations or prejudices, but not on scientific analysis, are completely out of place (e.g. Stout 1947 b: 12; Marshall 1950: 85 seq.).

The Cuna writing represents a special type of writing. It can be called literature-writing. Whether a writing belongs to this type or not is independent of the semiological structure of the characters: the Cuna, for example, write literature-writing with both their own characters and Latin characters (e.g. in 1.1.1, 1.3.2 b, 3.2.2.8 b).

The relations between literature and writing are certainly not of a casual nature, as the Chadwicks (1940: XI) thought. It is also unacceptable to claim that “barbarians without writing” would have no literature anyway. The relations between literature and writing can take on many forms. Their nature has an influence on both the writing and the literature.

CHAPTER II: STRUCTURE AND MEANING OF THE GENRES

6. CLASSIFICATION-STRUCTURE AND MEANING

Plan of Additional P-Theories

The *p*-theory generates all poetic texts, i.e. it determines their general properties. Of course, this does by no means cover all properties of the poetic texts. Now, in the investigation of the non-general properties, one might proceed in analogy to that of the general ones, grouping the poetic texts into classes which in turn would again have to be investigated with regard to their general properties; next, a system might again be constructed generating chains with these very properties, i.e. representing an additional *p*-theory, which would be specific of the genre under consideration. This process might be iterated until only a few individual texts remain. Ideally, all additional *p*-theories would be mere specifications of the *p*-theory in the form of limitations of the possibilities of interpretation. The genres and subgenres themselves might then be defined by limitations of this very kind.

However, such a procedure is hardly practicable, because even at the highest level of the planned additional *p*-theories the specific properties of each individual text—and that means in the last analysis the individual properties of its author, the poet—make themselves felt to such an extent, that they are virtually beyond such a rigorous approach. Methodically speaking, this means that already at this level of analysis hermeneutical methods have to be applied to an increasing extent. This would still leave open the possibility to begin with a rough description of the genres, and only then to discuss individual texts. However, it is better to combine the analysis of the genres with that of the individual texts, for the half-rigorous, half-intuitive method, which must be used in the investigation of the structure of genres, and the hermeneutics of individual texts complement one another. But with this we have to admit that we are now definitely operating in an identification model, for it is now no longer possible to find a generating system which is specific for the genres. At the same the

importance of the description of general structures of the respective objects decreases. The task of classification—so to speak the description of the syntagmatic structure of the set of poetic texts—now is placed into the foreground.

Basis of the Classification-Structure

The classification of the texts according to their syntagmatic structure has a deeper significance than one is at first inclined to think. This has to do with the fact that the classification is more than an isolated process, insofar as it turns out to be a part of a structural description of the distribution of the textemes in the social order. For parallel to a classification according to internal structures, there is another one according to the contexts (or rather contextemes) of the realisation of the textemes, and one according to their functions. Between the results of these classifications there is, if not a one-one-relation, a one-many-relation (resp. a many-one-relation). As the internal syntagmatic structures imply, at least in part, contexts and functions, we may now no longer speak of these structures alone, for we have always to assume an interdependence of their conditions.

The environment in which a texteme is realised is called its context. The class of all contexts of one texteme is called the contexteme of this texteme. All contextemes taken together form a syntagmatic structure, which is part of the social order. (According to an expression made popular by Pike (1954 seq.) the contextemes may be called slots.) A contexteme may be filled by several textemes, a texteme can be realised in only one contexteme (apart from the fact that all textemes can also be realised in a common contexteme, viz. the school). The textemes of one contexteme are elements of a paradigm, i.e. they form a class of textemes. The class of contexts of a texteme in which the texteme always occurs in specific realisations, resp. in which all realisations have certain characteristics, consists of combinatoric variants of one contexteme. All other types of variants are free variants.

The contextemes among themselves form taxonomic hierarchies. For example, the contexteme-class "feast for the dead" consists of two contextemes, one for dead adults, and one for dead children. The first of them has two combinatoric variants, one for dead men, and one for dead women. The contexteme-classes and contextemes of the Cuna literature are:

- I. Therapy $\left\{ \begin{array}{c} \text{sickness 1} \\ . \\ . \\ . \\ . \\ \text{sickness } n \end{array} \right\}$
- II. Initiation (with a long series of consecutive contextemes)
- III. Feast for the dead $\left\{ \begin{array}{c} \text{for adults} \\ \text{for children} \end{array} \right\}$
- IV. Entertainment
- V. Onmakket (a political meeting with the consecutive contextemes (1) retrospect, (2) preview, (3) relaxation)
- VI. The moment before the recitation of a text $\left\{ \begin{array}{c} \text{before texteme 1} \\ . \\ . \\ . \\ \text{before texteme } n \end{array} \right\}$
- VII. During the gathering of $\left\{ \begin{array}{c} \text{plant 1} \\ . \\ . \\ . \\ \text{plant } n \end{array} \right\} ; \left\{ \begin{array}{c} \text{animal 1} \\ . \\ . \\ . \\ \text{animal } n \end{array} \right\}$
- VIII. At the cradle of a child
- IX. Various secular occasions conventionalised not at all or only to a small extent.

(In the present enumeration those contextemes which are syntagmatically related to one another are put in (), those which are paradigmatically related to one another in { }.)

The correlations between contextemes and textemes are of the one-many type. Thus the textemes are now grouped in classes with common contextemes. But as it is impossible to decrease the number of contexteme-classes, it is necessary to classify additional criteria if we want to arrive at a smaller number of larger classes of textemes.—For this purpose all

textemes can be grouped in a linear discourse, in which the individual textemes have, so to speak, the function of sentences. Next—though only in an imprecise sense—equivalence-classes (necessarily determined by the macrostructures) can be formed. In this way we obtain four large classes of textemes:

A. Epics (Textemes in which the initial and the final scene are realisations of one and the same sceneme. Their content is a journey into an external world.)

B. *Tatkan ikala* (One single texteme which in most cases is only realised in sections. The contents of the sections follow one another in time.)

C. Animal tales (Textemes with the macrostructure of the animal tales known all over the world.)

D. Simple texts (Textemes, each of which consists of only one sceneme.)

The equivalence classes are distributed over the contextemes as follows:

	A	B	C	D
I	X	—	—	(X)
II	X	—	—	(X)
III	X	—	—	(?)
IV	X	—	—	(X)
V, 1	(X)	X	(X)	—
V, 2	X	—	—	—
V, 3	—	(X)	X	—
VI	—	—	—	X
VII	—	—	—	X
VIII	—	—	—	X
IX	—	—	—	X

("X" denotes a combination; "(X)" means that textemes of the respective equivalence-class may occur before, after, or in a field position of the main texteme of the respective contexteme—i.e. in a subcontexteme so to speak; "—" means that a combination is not possible.)

While at first the correlations between contextemes and textemes were of the one-many type, we now see that the correlations between equivalence-classes of textemes and contextemes are also of this type. Thus no taxonomic classification is possible which would do equal justice to contextemes and equivalence-classes. Nevertheless, for one contexteme (resp. subcontexteme) there is only one equivalence-class in each case, so that the classification according to contexteme-classes of textemes and that

according to equivalence-classes of textemes can be represented in a taxonomic hierarchy.

Now, as the manifest functions of textemes have a one-one correlation with contextemes, it can be said that the elements of an equivalence-class in a contexteme have an unambiguous function. Macrostructures form (independent of their content) in contextemes a secondary semiological system. The relation between the designans, the literary structure, and the designatum, its aesthetic information, is the meaning. The relation between the aesthetic information and the contexteme of the literary structure is the function. Meaning and function correspond to one another.

When establishing genres we thus have to take into account contextemes and equivalence-classes as well. Because this is, strictly speaking, not possible, as we have shown, a compromise has to be made.—A correlates with I—IV, D with VI—IX, V with A, B, C. Thus three groups appear in clear-cut outlines:

- the epics, which have a uniform structure, but several contextemes and functions;
- the historical-political texts, which have a uniform contexteme, the political meeting, but several structures;
- the Simple Texts, which have a uniform structure, but several contextemes and functions.

A further classification of these three genres, according to contextemes and equivalence-classes, is as follows:

1. Epics
 - 1.1 Therapeutical Epics (A I)
 - 1.2 Initiation-Epics (A II) (including the other texts of initiation ceremonies (D II))
 - 1.3 Epics for the dead (A III)
 - 1.4 Entertainment-Epics (A IV)
2. Historical-political poetry
 - 2.1 Tatkan ikala (B V 1)
 - 2.1.1 The Mythical Age
 - 2.1.2 The great Neles (A)
 - 2.1.3 Migrations and foundations of villages
 - 2.1.4 The post-columbian period
 - 2.2 Pap ikala (A V 2)
 - 2.3 Animal tales (C V)

3. Simple Texts

3.1 The origin of things (Saila ikala) (D VI)

3.2 Admonitions (uanaet) (D VII)

3.2.1 To medicine-plants (ina ikala)

3.2.2 To animals

3.2.3 To pests

3.3 Personal poetry (D VIII, IX)

3.3.1 Cradlesongs (D VIII)

3.3.2 Lyrics (D IX)

3.3.3 Humorous songs (D IX)

(The catalogue of selected works of the Cuna literature is based on this classification.)

Explanation of the Classification-Structure

The classification outlined so far is explained and justified by the diachronics of the system of the genres, the history of the equivalence-classes, and of the contexteme-classes of textemes. This history will have to be discussed in detail. For the time being we can only mention the general principle of the underlying process.—Equivalence-classes are established on the basis of uniform structures of their members, i.e. all textemes of one equivalence-class are based on the same principle of construction. At a fictitious point of time equivalence-classes and contextemes are thought to have a correlation of the one-one or many-one type. According to Tynjanov (1967: 30), in general “a principle of construction introduced in a partial field has a tendency to spread as far as possible to other fields. In this respect one could speak of an “imperialism” of the principle of construction . . . An example is the generalisation of the epitheton . . . : if the poets speak today of the “golden heart” and of “golden hair”, tomorrow they will have a “golden sky”, a “golden earth”, and a “golden blood”. Of a similar nature is the habit of conforming to the victorious structure or genre . . .” Applied to the Cuna literature, this means that the principle of construction of one of the hypothetically established equivalence-classes has the tendency to spread to other equivalence-classes. It will be most successful with those classes which have similar principles of construction, and this is—for functional reasons—most likely with those of the same contexteme. Thus a principle of construction will at first cover the textemes of one contexteme, then go beyond this, and progressively alter those of other contextemes, finally those of other classes of contextemes.

"Spreading to larger and larger areas, the principle of construction finally tends to leave the circle of phenomena specific for literature . . ." (Tynjanov 1967: 31), i.e. it finally spreads to other sectors of the culture. Of course, also the reverse process is possible; a principle of construction can also spread to the literature from another sector of the culture, covering at the beginning a sector of literature which is related to it, and then spreading out from there.—This is actually the case with the Cuna: a principle of construction of the cultural sector "ritual", in its contexteme therapy, spreads to the cultural sector "literature" in the same contexteme (therapy), covers the textemes of the latter, and from there expands further in the cultural sector literature.

Tynjanov explains the rapid spreading of a principle of construction by the fact that if it did not permanently exceed its framework it would soon become automatic (1967: 30), and thus would be immediately reified. Reification, however, is a specific property of the bourgeois-industrial civilization; analogous phenomena in a tribal culture cannot be explained by it.—We have seen that an equivalence-class of textemes in a contexteme (or sub-contexteme) has an unambiguous meaning (function). This means that a standardization of the syntagmatic structures takes place exactly as long as the paradigmatic structure does not offer resistance to this, i.e. as long as the expansion of the principle of construction does not produce synonyms. If we choose a mentalistic interpretation of the classification-structure of Cuna literature, it follows that the "imperialism" of a principle of construction is the result of the structural pressures (of Pei 1966: 217 seq.; Pike 1947: 58 seq.) which the syntagms and paradigms of the classification-structure exert upon one another. The driving-force of the latter, in turn, is the principle of maximal simplification, the mental counterpart of Occam's razor.

The Classification-Structure in the Cunas' Own Interpretation

The entire knowledge of the Cuna—insofar as it exceeds everyday experience—is formulated in the poetic language (cf. Gasso 1912: 250). It can be reported in prosaic language, it is true, but in that case it is nothing but a statement of the content of a poetic text (resp. of a texteme). No division of science and literature has taken place (which, of course, does not exclude the existence of poetic texts, the purpose of which is not the passing on of knowledge). This explains why the classification of the

textemes made by the Cuna themselves is in the first place a classification according to the knowledge expressed in them, supplemented by a classification according to contextemes. According to a tradition (2.1.0.5), a large part of the knowledge of the Cuna goes back to Ipeorkun, the cultural hero of the Cuna, who, however, did not create it himself, but has only passed it on. Before his death Ipeorkun installed eight successors. To each of them he entrusted one field of knowledge. As a field of knowledge is the content of a class of textemes, the history of the tradition gives information about how the Cuna themselves classify their literature:

- (a) The divine way
 - (b) The heaven (?)
 - (c) The history of the ancestors
 - (d) Botany
 - (e) Apsoket ikala
 - (f) The structure of the world
 - (g) Origin of things
 - (h) Botany
- (2.1.0.5, p. 271)

(h) is a repetition of (d)—probably in order to reach the number eight, which plays a certain role as a survival of an old concept of the world based on wind directions. The meaning of (b) is not clear. The rest correlates as follows with the classification given before: (a)-2.2; (c) (with (f) as a component)-2.1; (d) and (h)-3.2.1; (e)-1.1; (g)-3.1.—The Ipeorkun-classification thus is not complete, but establishes only such classes which may be proved to be classes by scientific structural analysis. It is supplemented by another classification (Holmer 1951: 28). Olotepilikinya divides the epics into three “branches” (e ana): therapeutic epics (1.1.), epics for the dead (1.3.), initiation-epics (1.2.).

As these self-classifications do not claim to be complete, they cannot be reproached with leaving out the secular textemes (1.4., 2.3., 3.3.). That the class 3.2. is represented only by its subclass 3.2.1. is explained by the fact that this is indeed the largest and most important one.—Thus we can say: the self-interpretation of the Cuna with respect to the classification—structure of the textemes is almost identical with the results of scientific analysis—at least it does not contradict them. This is a rare and surprising fact, which helps considerably to justify a mentalistic interpretation of the classificationstructure.

7. EPICS

Origin of the Epic

In the wake of the attempts to find the origin of myth in ritual (Frazer 1963; Raglan 1965, 1956; Hyman 1965) various attempts have also been made to detect the origin of the epic of the Old World in the ritual (e.g. Weston 1957). Even Lord (1965, 2nd part) tries to derive the Epic of Gilgamesh, the Homeric, and the medieval epics from sacral kingship.—Because of the unusually numerous sources there is historical evidence for the theory that a very essential part of the structure and function of the Cuna epic has its origin in the shamanic ritual, although some conjectures are necessary to support it. This particularly fortunate situation is due to the fact that the Cuna epic is of relatively recent origin, probably not older than 150–250 years, although its individual components are certainly much older.

But first we have to assume that the reader is willing to apply the concept of “shaman” to the ecstatic medicine man of South America, as done, for instance, by Métraux (1963). If here and in the following we speak of “shamanism”, we mean its South American form, which differs in many ways from the Siberian one, above all in the application of toxic substances to produce a state of ecstasy.

The basic motif on which the action of all Cuna epics built, is a journey of one or several persons into an external world and events in this external world.—As a spiritual experience, the journey into an external world is an important component of the séances of Siberian and American shamans, as a theme of myths it can be found almost everywhere (cf. Hultkrantz 1957), as an element or as a ‘link and frame’ story it occurs in the Old World epics from the Epic of Gilgamesh to Dante’s *Comedia*, in the field of philosophy it appears in the works of Parmenides, and then it is found above all in the Christian and Jewish gnosis and in the hermetic tradition (Scholem 1954: 49 seq.; Festugière 1950: 312 seq.; Diels 1922). And today it is receiving a fresh impetus in science fiction.

The theme of a journey into an external world presupposed a cosmology which opposed to the known world an unknown one (the external world), be it as an image or as a counterimage of the known one. Such an image will be constructed with great likelihood wherever time and space are reflected upon. It depends on the knowledge of the world where and how the external world is imagined. Tribal peoples with their relatively narrow concept of the world do of course conceive the boundaries and the accessi-

bility of the external world in a manner different from that of a science fiction author, who cannot simply ignore the results of astronomy (cf. Mühlmann 1966). For the structure and the function of the speculations on the external world these speculations are rather irrelevant whether the external world is transferred along the time-axis into the past as a Golden Age, or into the future as a utopia, whether it is transferred along the space-axis upward as heaven, downward as hell, whether it is shifted to other planets, or simply behind the horizon of the known world, or whether it is deprived of all time-space coordinates—in each case the unknown world is furnished with elements of the known one (cf. Bowra 1967: 218 seq., in particular p. 245), whether as a warning example which is to have a retroactive effect on ways of acting in the world, or as a means of “coping with the pressure of reality” (Topitsch 1966: 244), or for more specific reasons.

But if someone wants to report on the external world, he must be able to say how he has obtained his knowledge. The choice of a model of explanation again depends directly on the level of knowledge: while the science fiction author makes his hero travel to the external world in a rocket the conceptions of a biomorphic soul living apart from the body allow the tribal peoples to conceive the journey into an external world as a journey of souls. Such conceptions of a journey into an external world as a journey of souls need not be rationalisations. It is rather in dreams and in states of ecstasy that the basic experiences which have led to the whole complex of ideas of a journey into an external world are to be found (cf. Frazer 1963: 235 seq., in particular 244 seq.; Topitsch 1966: 181 seq.).

The origin of the epic among the Cuna is obviously the process of literalisation of the journey into an external world experienced by the shamans in a state of ecstasy, older structures of literature having influenced this development. Because of the incompleteness of the ethnographic material, in America this process can be shown—at least to such an extent—only with the Cuna.

One of the most important functions of the shaman is his therapeutic function. Among many South American tribes sickness is explained by the loss of the soul or of one of the souls of the sick person (Ackerknecht 1963: 623). Now the shaman's task is to travel to the external world, to seek the lost soul and bring it back to its body. For this purpose he blows tobacco smoke over the patient, sings, entrances himself, massages the patient and treats him with medical plants (Ackerknecht 1963: 626). Little is known of the content of what he sings during this treatment, but from what is known.

we can conclude that it consists of magic formulas and invocations of spirits (Ackerknecht 1963: 627). The ceremony represents the struggle between the shaman and the spirits of sickness (Ackerknecht 1963: 626). Most of these elements are spread in one form or other over the whole of South America. But only among the Cuna are they found not as a ceremony, but as the content of texts. The incantations and invocations of spirits are put into direct discourse. As an acting figure the shaman appears in the narration of the singer in the third person (gramatically). The shaman's journey into an external world is no longer an ecstatic experience, the struggle with the spirits of sickness is no longer represented in a ceremony; on the contrary, all this is narrated to the patient in long verse epics by a singer who sits motionless on a chair, at the most burning cocoa-beans or pepper (cf. Wassén 1961 b: 19). Trance and ecstasy have disappeared. The theory on sickness has been retained (cf. Nordenskiöld 1928 c; Wassén 1957), the practice of the therapy has changed.

The principle of construction of the macrostructure of the ritual, journey into an external world, struggle, homeward journey, in one contexteme with the function "therapy", spread to another cultural sector, literature, and transferred to it this very macrostructure. This allows the importance of the ritual itself to recede into the background.

Informations dating from the 17th century (Salcedo 1908: 134 seq.) confirm that the treatment of the sick among the Cuna in the main followed the usual South American pattern. However, they are inaccurate and do not supply a clear-cut picture. The Cunas' own tradition of history, however, has clearly preserved the transition from the therapeutic ritual to the therapeutic epic. Thus we read, in the greatest of the Therapeutic Epics, the *Apsoket ikala* (1.1.1):

"At the time of the great neles (i.e. naa neles) they showed us this (i.e. the struggle with the spirits) itself, but today they sing only."

(2.1.0.3, p. 144, 146)

In addition, it is irrelevant for the hypothesis set up here whether the epic has its origin in the therapeutic ritual, or in the séances of shamans with a somewhat different function. And there is no doubt that there were ecstatic séances among the Cuna (approximately up to the middle of the 19th century). They have been repeatedly described (Wafer 1903: 60-62; Lussan 1705: 46; Ariza 1774; Cuervo 1891 seq. (vol. II): 321; A. Reclus 1888: 211, Franco, ms; Bell 1909: 628). E. Restrepo (1888: 114) was the first traveller to state that the "neles", as he knew them from the books of travels by his predecessors, did no longer exist, that they had changed into

"simples rezadores".—The Cuna themselves have also in terminology the differences between the ecstatic neles of the past and the neles of today, whose clairvoyant powers are confined to dreaming, and who may therefore by no means be called "shamans": the old neles are called naa nele, the new ones ulup nele. The naa neles are attributed many faculties which also in other cases play a part in shamanism. However, legends have to a large extent been formed about certain personalities. The last naa nele died around 1870 (Nordenskiöld 1938: 85; general information on neles: Nordenskiöld 1938: 80 seq.; Wassén 1938: 69 seq.; Wassén 1947: 106 seq.; Stout 1947 a: 32; 101 seq.; Marshall 1950: 196; Santa Teresa 1959: 174; Smith 1958).

The interruption of the tradition falls into the first half of the 19th century, into a period during which the culture of the Cuna underwent decisive change. As the colonial revolution had ended Spanish oppression, the Cuna could leave their concealed detached farms in the forests (Wafer 1934: 89) and resettle on the isles in relatively large villages built closely to one another (cf. Stout 1947 a: 54), which undoubtedly has brought about an increase in the possibilities of communication, and thus a general intensification of cultural life. At the same time one of the hitherto most important activities, war, became dispensable.

Since the beginning of the 16th century the Cuna lived in permanent war with the Spaniards and other groups who wanted to invade their territory (cf. Krieger 1926: 48; Stout 1947 a: 49 seq.; Marshall 1950: 199). This caused the emergence of a privileged class of warriors, the urunia (cf. Salcedo 1908: 128, 133; Ariza 1774; A. Reclus 1888: 213; E. Restrepo 1888: 114; Torres 1958: 538; Wassén 1962: 8). The construction of fortifications, kalus, to which one could withdraw in case of an attack, was an important technique of warfare (Wafer 1934: 90; cf. Holmer and Wassén 1963: 80; Pinart 1887: 20). The Cuna, in turn, also attacked the forts of the Spaniards (Wassén 1940), so that attacks on forts were probably the most important form of struggle. It is therefore described in the historical poetry, in which war necessarily plays an important part (e.g. in 2.1.3.6.). Such songs are certainly very old; travel books give evidence that they existed as early as in the 17th century (Barbour 1907: 244).—They provide the model for the struggle between the tutelary spirits of the "shaman" and the spirits of sickness in the therapeutic epics, in which the troupes of the "shaman" invade the forts (kalus) of the demon and free the robbed soul of the patient.

The war tale was separated from its realistic frame of reference, and by

the transposition of the "enemies" into the external world, it was blended with the shamanic ritual and thus became an epic. Thereby it obtained a symbolic character; the epic originated as a secondary semiological system, as a symbolic action. At the same time it preserved the function of the ritual, which it replaced in the social order by making the contexteme of the ritual its own contexteme. In this sense the concepts of the epics are older than the epics themselves. For a given concept a new form was created, and thus a new meaning, the epic. This very process is the "literalisation" of the ritual.—It could be that one of the marginal conditions of literalisation is that, perhaps under the influence of calvinistic settlers in the 17th and 18th centuries (Stout 1947 a: 52), the Cuna refrained in a puritan manner from the use of ecstasy techniques.

Therapeutic Epics

At the beginning of an epic there is a scene of domestic peace and of calm, of the everyday course of evening, night and morning. Sometimes the sea is rough; it becomes calm in the course of the singer's contemplation.—Then the calm is disturbed: a messenger reports that the enemies (the spirits of sickness) have carried someone (the soul of a sick) off to the external world. The singer prepares for his task and goes into the house of the sick. He places his nuchus (wooden figures, the residences of his tutelary spirits) under the sick person's hammock (cf. de Smidt 1948: 8). He admonishes his tutelary spirits, explains to them their task of delivering the abducted soul, and sends them into the external world. The tutelary spirits embark on their long and dangerous way, on which they will have to undergo many adventures with the monsters of the external world. Finally they arrive at the fort (kalu) of the demon who has carried off the soul. They invade the fort and force the demon to surrender the soul. Sometimes the demon is killed (burned). Then they travel the long and dangerous way back with the soul until they finally arrive in the house of the sick and the soul can reenter the patient's body.—It is midnight, and it is to be feared that the demons will try to carry off the soul once more. The singer makes his tutelary spirits guard the way. When the demons try to sneak into the house, they are beaten off.—The conflict is resolved, the calm of the beginning is restored. The singer drinks chicha with his spirits.

In a story of approximately this kind, with episodes and detailed descriptions, a lot of micro- and macrostructural relations arise, on which the aesthetic value of the text is based; of course, these relations cannot even

be sketched by a mere statement of content. Because of the individual character of each work of art it is also not possible to state them jointly for several texts, but only separately for each individual text. But also the general features of the macrostructure show a remarkable order: in most cases the beginning and the end are only different realisations of one and the same sceneme; between them the conflict develops in two sections: delivery of the soul and defense of the soul; the first of them is again divided into three parts, journey into the external world, battle for the fort, homeward journey, again one sceneme being surrounded by two realisations of another one. (By this the two principal forms of struggle, attack on enemy forts and defense of one's own fort, are paraphrased.)—If individual texts are considered, further orders, characterised by a similar tendency to achieve symmetry, appear within the framework of this basic structure, so as to bring about a well-balanced overall picture, which is more than satisfactory from an aesthetic point of view.

In one position of the text—in most cases during the report on the events in the underworld—an episode is inserted, which under the aspect of the course of the action in time would be expected to appear at the beginning, namely a report on the events which have sparked off the conflict, for instance the seduction of a man (the soul) by a female demon who has masked her actual ugliness with the aid of magic means in order to lure the man into her fort. (The Cuna marriage is uxorilocal; thus, among other things, a social problem is treated.)

The macrostructure is curiously interwoven with the contexteme.—When the singer begins his recitation under the hammock of the sick, he first reports on those events which he or the patient have actually witnessed. While placing the nuchus the singer arrives in his narration exactly at that point of time which is also arrived at in the context. Up to this point reality is in conformity with the singer's narration (Harris 1926 b: 17 seq.). Through the very detailed description the patient must have identified himself with the patient of the story, and he must have reconstructed in his mind the events immediately before. But at this point the narration becomes symbolic. If the patient has hitherto been able to verify everything, he will also consider the following to be true, and will not become aware of its symbolic character.—That the identification and the process of considering the story to be true do take place and are experienced by the patient is documented by the report of a patient (Pérez) on the recitation of 1.1.2:

“This man (the singer) sat himself down by Pérez' hammock and com-

menced his singing. While he was singing, Pérez went to sleep. While sleeping he saw people arriving at the spot in the forest where he had been. Those were *nuchus*. They said to him: "Let us go home", and he walked home in the midst of them protected from the evil spirits. When Pérez reached home he awoke, and at the same moment the chant had come to an end. That very day he recovered completely from his illness." (Norden-skiöld 1938: 335 seq.)

In order to understand the mode of operation of the symbolism we have to emphasize that the therapeutic epics are only used for the treatment of diseases which may be expected to be due to psychic reasons, also according to the findings of our medicine, and which therefore can be cured by psycho-therapeutic methods. The Cuna therefore use a specific epic for each disease (or at least for each type of disease), e.g. 1.1.7 for the curing of serious mental disturbances, 1.1.6 for headache, 1.1.5 for complicated births.

The epic is a secondary semiological system: it operates at two levels, a fictitious one (narration of a journey into an external world), and at a real one (curing of a disease); the reduction of a conflict at one level implies a similar process at the other level. This is possible because the patient does not separate the two levels, but identifies them.—Accordingly the symbolism is designed for the disease to be cured. In 1.1.5, for instance, the external world symbolises the uterus.

The "soldiers" penetrate it:

The caps of the *nelekan* (tutelary spirits) shine white,
the caps of the *nelekan* are whitish.

The caps of the *nelekan* become flat and low, quite like spikes, quite straight.
The *nelekan* become frightful . . .

(1.1.5: 230-232)

The *nelekan* swing themselves up on the table (vulva-metaphor) of the hammock, they move upward like a penis.

(1.1.5: 239)

Now all details with their symbolic concept are coordinated to the dominating symbol "external world". Rivers swell and enormous floods wash everything away, driftwood, monsters, calabashes; everything is streaming towards the mouths of the rivers:

"Towards the East the silver wind blows; a child comes down, a child has come down."

1.1.5: 656, 657)

The purpose of the *Nia ikala* (1.1.7) is to cure a mental patient. Here the external world is below the surface of the sea. The sick has become addicted to the phantom of a beautiful woman. But she is not beautiful; her ugliness is illustrated. The female demon is captured and burned by the soldiers, the soul of the sick is freed from the bottom of the sea and brought back to the surface.—It is true that the Cuna would not speak of a subconscious mind, but the effectiveness of the symbols does not depend on their conscious formulation. The depths of the sea are immediately understood as a symbol of the subconsciousness. The love for that woman is unmasked as an illusion.—This episode is described relatively late, at a point of time at which the patient has already had plenty of opportunity to identify himself with the story in an unambarrassing manner.—Pictures of curious strangeness are interwoven with the course of action. Turtles cruising in little boats on a river at the bottom of the sea, digging throughs into the bottom of the sea, and securing them against the current with pieces of wood. The wood is used for burning the female demon.

In his excellent paper on the effectiveness of the symbols Lévi-Strauss (1967: 204 seq.) has compared the function of the singer of a therapeutic epic with that of a psychoanalyst: "In the treatment of schizophrenia the doctor performs the action while the patient produces his myth; in the shamanic therapy the myth stems from the doctor, while the patient acts." (Lévi-Strauss 1967: 221.)

The use of the verse epic for therapeutic purposes is by no means limited to the Cuna. In ancient Babylon, for instance, the *Atrahasis* epic was recited for the same purpose as the *Muu ikala* (1.1.5) is among the Cuna. Not only does it to some extent use the same symbols (e.g. flood) as the *Muu ikala*, but it also shows an astonishing similarity in the microstructure (e.g. certain types of parallelism).—Possibly the therapeutic epic—if not from the point of view of historical research, at least from that of the typology of evolution—must be regarded as an early form of the epic as such.

Initiation-epics

The Cuna conduct two puberty ceremonies for girls, the first of them at the first menstruation (cf. de Smidt 1948: 67–76; Stout 1947 a: 35, 93; McKim 1947: 80; Nordenskiöld 1938: 58 seq.; Torres 1957: 13 seq.; Severin 1953). The first ceremony consists of the arrangements for the first men-

struation which are widespread among tribal peoples (cf. Frazer 1963: 780 seq.). Insofar as their macrocycle is concerned, the texts recited on this occasion do not belong to the class of the epics, but rather to that of the "admonitions" (3.2.). Apart from the political meetings the second ceremony is the most important event in the social life of the village: the initiation-ceremony by which the girl is declared ready for marriage. It lasts approximately four days; on the last two or three days the leader of the ceremony, the *kantule*, sings together with his assistants almost without interruption a cycle of approximately 15 texts, some of which are obligatory, some optional. The first part of the texts of the cycle interpretes extensive ceremonies, the rules of which are rigorously observed, in sexual symbols: *Olowaipipile* (the sun) has sexual intercourse with *Olokukurtisopi* (the earth), in the bowels of the earth the fetus develops (Keeler 1960: 256-263; 1956 a: 85-88). (Unfortunately almost none of these texts is accessible).—The second part of the cycle is a symbolic representation of death and rebirth of the *débutante*, a means used among many tribal peoples for the dramatisation of the change of status (cf. Frazer 1963: 905 seq.). Consequently the construction of this part of the cycle is analogous to that of the death ritual and of the ceremony of giving a child a name: at the beginning the *kantule* sings a biography of the *débutante* up to the moment of the ceremony (de Smidt 1948: 73); next the *Tisala ikala* (1.2.1), an epic, and finally the *kammu ikala* (1.2.4 A), a text from which the *débutante* receives a new name (cf. Marshall 1950: 244). The biography corresponds to the dirge sung at the deathbed (cf. 1.3.4 A), the *kammu ikala* is a repetition of the ceremony of giving a name, by which the circle of feasts for the girl is completed, for also at the first feast, the piercing of the nose at the age of one a *kammu ikala* is recited (cf. Feeney 1941: 205). Having died, ascended to heaven and returned, equipped with a new name and a new nose ring, she may now reenter social life as a woman.—During the whole time the girl sits in a *surpa* (a small cottage) (Nordenskiöld 1938: 69) in which in former times also the séances of the shamans took place (cf. 2.1.2); for a long time she sits in a hole in the ground. At the end her hair is cut in a ceremony: this is described in symbolic form in the *Tisla ikala* (1.2.1), the way of the scissors.

The epic is not recited for the girl but for the villagers in the *chicha-hall*. While the therapeutic epics are recited for the patient, the *Tisla ikala* is a decidedly social event. It explains the process not to the *débutante* but to the community. The latter participates by drinking—in ceremonial form—intentionally up to point of losing consciousness. If someone were

not to get drunk, he would not be able to get into the realm of the dead after his death (Keeler 1960: 258; cf. Washburne 1961: 143 seq.).

The whole symbolic content of the feast is only based on the singing of the kantule (leader of the ceremony). For foreigners having no command of the Cuna language it is indiscernable (the numerous reports of travellers and ethnographers who have always described nothing but the ceremony give evidence of this).

For the Cuna the meaning of the epic consists of what is directly stated in it: "We say the spirit of a girl goes to heaven; so this spirit we took back again why we sing . . ." (Nordenskiöld 1938: 63). From the Cunas' picture of the world this conception can be explained immediately: the menstruation (*purpa*) is for him a metaphor of the soul (*purpa*) anyway; if diseases in general are explained by the loss of the soul, this explanation presents itself in particular in the case of the menstruation (especially of the first one); if diseases can be cured by the singer's making his tutelary spirits bring back the soul, this possibility must also exist in the case of the menstruation.—But this explanation is unsatisfactory under sociological and psychological aspects, for the *Tisla ikala*, unlike therapeutic epics, is not sung before the patient, but before the social group to which the patient belongs. Thus the function of the *Tisla ikala* is of a social nature: dramatisation of the *débutante's* change of rôle illustrates for the society, that she is no longer a child but a woman.

The macrostructure of the *Tisla ikala* hardly differs from that of the therapeutic epics. Unfortunately the present version (1.2.1) breaks off abruptly in the middle of the journey into an external world (in this case the realm of the dead), so that nothing can be said about the overall structure. But all of the scenemes of the therapeutic epics can be found up to that point in the macrostructure at which the fragment ends.

The domestic calm which is interrupted by a messenger (in this case announcing the feast); a description of the ceremony (of the initiation-feast) up to the point at which *Tetule* (*iettule*?) (the spirit of a flute which is blown by the cantule) embarks on the journey to *Tiokwa* (God's wife?) together with the "soldiers"; the dangerous way through the external world, the confrontations with the monsters.¹

¹ *Editorial note.* During the transcription of the manuscript *Tisla-ikala*, "Song of the Scissors" (GEM, B. 13877), *iettule* for "haircutter" in girls' puberty ceremonies was, due to Guillermo Hayans' hand mistakingly read for *tetule*, from *tete*, a kind of flute made of bone of the *tete*-bird and the spirit of such a flute. The misinterpretation was observed and corrected by Guillermo Hayans himself in a letter to the undersigned. S. Henry Wassén.

The initiation epic shows—synchronically—a close relation between text and context, and a different stage of literalisation. Whereas the therapeutic epics substitute a ritual, the initiation texts paraphrase it; they are part of the ritual, which at one point within the ritual they repeat completely in verbalized form and explain, by intensifying the symbolic content. They thus show the interlacing of poetry and ritual which is usual among tribal peoples. Nevertheless, from the point of view of the typology of evolution, the Tisla ikala can hardly be placed before the Therapeutic Epics, for also its macrostructure can only be explained as literalisation of the shamanic ritual, and as such is rather a derivate of the macrostructure of the Therapeutic Epics, or of their transposition into another contexteme, which, in turn, contains elements of an older ritual performed in the 17th century not during puberty ceremonies, but on the occasion of the “baptism” of children between six and nine months (cf. Salcedo 1908: 130 seq.)—Only those texts of the cycle which have no epic structure can—above all because of their close connection with the pantomimic dances accompanying them—be regarded as an integral part of the ritual. As such they fall into the class of ritual poetry—“lyrics” in the original sense—which from the point of view of the typology of evolution is older than the epics.

Epics for the Dead

The Epics for the Dead are brilliantly interlaced with their contexteme. The contexteme contains a (real) journey. This journey is paraphrased and given a symbolic interpretation by the textemes. If a Cuna dies, his body is laid into a hammock. While the relatives start singing dirges (1.3.4 A) in which the most important events in the life of the dead are recapitulated, a singer is sent for. He makes his preparations, places decorated sticks of masala (caña brava) under the hammock of the dead, and sings the Masala ikala (1.3.1) or the Nalup nakrus ikala (1.3.2). The singing lasts about 24 hours (during which time the singer is occasionally relieved by his disciples (cf. de Smidt 1948: 85)). Then under renewed wailing of the mourners the body is laid into a canoe together with the masala-sticks and various votive offerings, transported from the island to the mainland, where it is transported up a river and brought to the cemetery, where in the meantime the grave-diggers have dug a grave, in which the hammock with the body is hung up. The grave is covered and filled with earth. A cottage is built on it and furnished with a table, chairs and other household effects. (de Smidt 1948: 85, 87 seq.; Nordenskiöld 1928 a: 268 seq.; 1938: 453 seq.; Stout

1947 a: 39 seq.; Keeler 1960: 249 seq.; 1954 b, c, d; Torres 1957: 49; cf. further Pinart 1887: 23; Feeney 1941: 206; Puig 1948: 132; Reverte 1961: 103; Beach 1921: 131; McKim 1947: 94, 123; Krieger 1926: 88 seq.; Tinnin 1940: 62; Marshall 1950: 252; Galvez 1952: 87 seq.; Linné 1929: 247 seq.; Wassén 1949 a: 39 seq.; Pérez 1933.)

The text of the singer (1.3.1; 1.3.2) gives a detailed description of the ceremony up to the moment at which the body is laid into the canoe, leaving out only that which the singer sings (otherwise an infinite regression would occur).—But from that moment onward the description becomes ambiguous. The events now described occur—in relation to the moment of their recitation—in the future; in contrast to the Therapeutic Epics and the Initiation Epics, the singer now does not stop describing ritual reality; the characteristic events of the passage to the cemetery are always clearly recognizable. But in addition there are fictitious events, which are always related to the ceremony:

During the crossing of the sea the soul of the dead meets the monsters which populate the external world also in other epics (sharks, dolphins, sea-birds, which later on the funeral procession will actually meet). Then it goes up a river in the underworld (in reality: the river on which the cemetery lies). The trees on its banks, it is said, are pictures of women. The Masartule (the tutelary spirits living in the Masala-sticks) offer protection against all dangers, the monsters, the temptations. The soul of the dead goes to heaven, to the gates of the city of God (in reality: the cemetery). The gates are opened for it and in the city it is given a house among the souls of the other dead, in which it will from now on lead a heavenly life.

The symbols of the Epics for the Dead, “journey to the heavenly city”, has a double form. The ritual itself, the funeral, is already a semiological system; it is superposed and illustrated by a secondary semiological system, which has a designans under two aspects: the concept of “return home” (“quiet”, “last journey”) and the reference to the burial. The symbolic power of the two forms, of ritual and epic, is increased by the mutual penetration of the three semiological systems.

In the macrostructure the Epic for the Dead seems to show a deviation: there is no return from the external world. Nevertheless also in this case there is the same sceneme as at the beginning: conflict-free, domestic peace, transposed into a better world. The basic pattern is maintained; the problem of death is solved symbolically.

Even though the feast for the dead may show the most intense mutual penetration of ritual and epic, it cannot have formed the point of departure of literalisation although we clearly have a literalisation of the ritual in

the epic.—A derivation of the textemes from their contextemes in this case requires a cemetery which is far away from the village. But this has only been the case since a relatively recent time, for earlier—and insofar as they do not live on isles even today—the Cuna used to bury a dead person in his own house (Wassén 1949 a: 38 seq.; Nordenskiöld 1938: 454 seq.). Obviously we find in this case the reverse of the literalisation process which could be observed in the Therapeutic Epic, i.e. an extension of a literary macrostructure to a ritual which had a completely different structure (urn burial) before (cf. Salcedo 1908: 135; Menard de Saint Maurice 1889: 25; Stout 1947 a: 98; Linné 1929: 213 seq.): in the contexteme “burial” a principle of construction of the literature extends to the cultural field “ritual” in the same contexteme and alters it.

Entertainment—Epics

Entertainment-Epics are recited in the homes on long evenings which would otherwise be monotonous, or at chicha-feasts after the end of the official part (Holmer 1952 b: 8; Wassén 1938: 160). They are recited for the sole purpose of entertaining the audience (Wassén 1938: 160 seq.; Nordenskiöld 1938: 643).

Two subtypes can be distinguished: in the first men are the main actors, in the second anthropomorphised animals. The textemes of the first subtype deal with hunters and fishermen who have perished while hunting or fishing, with their adventures in the external world, in the world of the animals, or at the bottom of the sea. The textemes owe their origin to singular historic events. If a hunter does not return, his relatives consult a nele (a clairvoyant), who on the basis of dreams describes to them the whereabouts of the missing person. This description is made in poetic form, as an epic. The best compositions are passed on to the next generation and still recited after more than a hundred years (Holmer 1952 b: 7 seq.; Nordenskiöld 1938: 643).—In addition to the shamanic origin of the epic in the historical sense we here have a secondary one in the genetic sense although the dreams of the clairvoyant are shamanic only in a very reduced sense—a late, almost secularised development in the cultural field ritual, in the cultural field literature the definite secularisation of the epic. The reason for its composition and recitation with the original function of explaining a historic incident is—in contrast to the other epics—a unique one. But it is just this circumstance which makes it possible to free the

work from its original, limited function and to separate it from its magic-ritual background, i.e. to secularize it. Thus the process is initiated which—like in the Old World—results in an epic which can no longer be attributed any other than aesthetic values.

The world which unfolds in these epics is the world of adventure. Horrible monsters, blood-sucking vampires and sirenes alternate with magnificent cities and extensive drinking bouts. In scuffles the “heroes” are always victorious, women whose beauty is described with a wealth of details unusual even in Cuna poetry fight for their love.—The entertainment function of this literature can very well be grasped also against the background of our own prescientific knowledge. Nevertheless just in these epics the Cuna poet dispenses with the show down indispensable in non-secularized epics if only because of functional reasons. Also in this case, it is true, the circle of peace and conflict closes, the initial and the final scene again being realisations of the same sceneme of domestic peace and security, but the happy end is overshadowed by the melancholy and sadness of the hero, who is banished for ever from the community of men.—As an example we mention the end of the *Inatoipipiler ikala* (1.4.1). In the evening one of the heroes lies in his hammock at the bottom of the sea, cared for by his new happy wife. At an insurmountable distance, on the surface of sea, he sees the lights in his mother’s house gleam and shine:

The girl *Olowilasopi* stretches the hammock for him.

He sees the sun leave the world in darkness.

The boy *Inatoipipiler* looks round in a corner of the walled room:

The house of his mother rises, the golden candles of his mother rise,

They begin to shine, to flash, to blind,

They begin to illuminate, to give light, they shine far over the surface of the sea.

(1.4.1: 971–976)

The epic as a symbolic action attempts to reduce a dissonance, the death of a group of young men which is felt to be unjust. The macrostructure determines the end. But by means of the principle of variation, which determines the macrostructure of the entire literature, the poet succeeds in giving a new meaning to the predetermined course of the action: he does not resolve the dissonance, but he mitigates it by accepting death. In compliance with all structural laws the poet succeeds in saying something completely new, which derives its vigour not least from the fulfillment of the poetic rules.

In the secularized epic also an important social problem is given symbolic shape: when a young Cuna is married—often against his will—he goes to live in the house of his wife and must henceforth work for his father-in-law. The marriage is initiated by the father of the girl (cf. Stout 1947 a: 26, 37, 97; Feeney 1941: 208, de Smidt 1948: 77; McKim 1947: 32, 87; Nordenskiöld 1938: 28 seq.; Iglesias 1939; Marshall 1950: 245; Torres 1957: 23 seq.; Galvez 1952: 82 seq.). The main reason for which the inhabitants of the external world abduct men is their desire to have sons-in-law. The adult men in the external world are addressed as “kilu” by the abducted persons, in the same way as a man addresses the members of the family into which he marries as “kilu”.—Thus the epic confronts us—in the form of a journey into the external world—with two problems superimposed on one another: death and marriage. For both of them it offers the same symbolic solution (cf. Fischer 1963: 263, Lévi-Strauss 1968).

In the texts of the second subtype of the entertainment-epics, in which anthropomorphized animals are the main actors, social problems play an even more important part. The characters of these texts stem from the animal tales (2.3) and the animal songs (3.2.2); compared with the other epics the macrostructures show slight modulations; the texts are shorter than those of the other epics; the external world is no longer located in spheres inaccessible to normal human beings, but in clearly defined geographic areas: on distant isles, in Peru or other countries which the Cuna have visited as sailors. The reason for the journey is no longer given by the interference of powers from outside society but by social conflicts.

In (1.4.6) Tapkala (the heron) is scolded by the woman he has just married and for whom he has worked diligently. He signs on for a foreign ship; he imitates the language and the customs of the foreigners, he starts drinking. He travels to Lima, but he is unable to forget his wife. When he comes back to her she weeps bitterly, but it is too late: Tapkala has become a stranger. He gets drunk and starts a scuffle with other villagers.

As for its function the Tapkala ikala does not belong to the epics. The problems—domestic differences, and the negative aspect of acculturation—absolutely belong to the historical-political poetry, but the scenemes are all taken from the epics: fishing, the voyage, foreign countries, the drinking-bout, the scuffle. Also the basic features of the macrostructure, departure and return home, are maintained.

However, these epics are no longer non-transparent secondary semi-ological systems, they are no symbols. Their attitude and their mode of operation are no longer that of the “myth”, but that of criticism.

8. HISTORICAL-POLITICAL POETRY

Contexteme

The contexteme of historical-political poetry is a certain form of political meeting (onmakket), namely the largest and most important one, in which all villagers take part (but cf. also Puig 1948: 77). It is convened by the sailas, the three elected chairmen of the village, on special occasions (GEM 1947.19.52. Nr 5/6), but at least once a month (Holmer 1951: 20), and lasts approximately from sunset to sunrise. The details of the structure of the contexteme vary from one village to another, but the basic elements of the structure are always the same: the meeting takes place in a meeting-house (onmakket neka), the men sit along three of the walls, the women in front of them, in a smaller circle. The first and the second saila lie in hammocks their faces turned to the unoccupied wall of the house, along which there are vessels with chicha which the women serve to the men from time to time (Wassén 1949: 47 seq.). The first saila recites in poetic language the most important events that have taken place since the last large meeting, the second saila chiming in with "tekie", "so it is", after each verse (cf. Gasso 1912: 250). Next the second saila also sings a report on the events since the last meeting, the first or the second saila singing the "tekie". Differences between the two reports result from the fact that the first saila deals mainly with problems of foreign policy, the second with those of domestic policy (Holmer 1951: 17, 185) and that both also recite their dreams (GEM 1947.19.52. Nr 5/6; cf. Nordenskiöld 1938: 426 seq.).— Following these reports on recent events the first saila recites part of the Tatkan ikala (2.1), next the second the Pap ikala (2.2) (Holmer 1951: 185, 20). Each of the recitations is followed by a lecture of an arkala, in which the metaphors of the songs are explained and the texts given a moral interpretation, an exegesis, an application to current problems, admonitions to behave in compliance with the norms (Marshall 1950: 260, 82). Now and then one of the sailas introduces an element of relaxation into the strict order of the meeting by reciting an animal tale (2.3.) (Marshall 1950: 187). During the recitations the sualipets (kind of supervisors) rise at intervalls with the traditional call "kapitamaarye, nue parittomaarye" (don't sleep, listen well) (Holmer 1951: 19; Wassén 1949: 50).

For the non-Cuna it looks as if many listeners were asleep, as if the songs had a "monotonous" and "somnolent" effect (Wassén 1949: 49). Maybe many a listener is struggling with fatigue, after all it is the normal sleeping time, but the Cuna themselves emphasize that they follow the

recitations with close attention (GEM 1947.19.52. Nr 5/6), that they often even try to learn the texts by heart (Galvez 1952: 67).

Political meetings during which history and politics are dealt with in songs are wide-spread in America, and as "areyto" they have been early documented (Oviedo, Tomo I, Lib V, Cap. I, p. 127; Wassén 1949: 53 seq.; 1966: 168 seq.; Fock 1963: 216-230; Lowie 1963: 343). Also for the Cueva, whose cultural descendants the Cuna are in some respects, areyos are documented (Oviedo, Tomo III, Lib. XXIX, Cap. XXVIII, p. 137).

Texteme and Text of the Tatkan ikala

The Tatkan ikala (2.1) tells the "history" of the Cuna from the beginning of the world up to the present time. Apart from the fact that the Tatkan ikala deals with the history of a tribe, not of a family, of all European forms the legend as Jolles (1965: 62 seq.) has described it as a "Simple Form" is next related to it in style, in function, and in the origin of the material. The beginning of the Tatkan ikala is made of materials which in the traditional, unfortunately rather inaccurate terminology are called "myths" and the motifs of which have become wide-spread also outside Cuna literature; this is followed by a section which is determined by hero characters (with the culture-specific properties of the hero as discoverer and teacher of morals); the third part consists of narratives of migrations and village foundations; the final part is made up of narratives of confrontations with the Spaniards and other colonial powers. At least the last two sections show a definitely historical character and can in part be coordinated with the historical data recorded by Europeans.

In the preformulated terminology of folklore one might now speak of myths, legends, and historic narratives. But the individual sections are fused without caesuras into one single work, for the Cuna there is no qualitative difference between the sections (as is evidenced, among other things, by the always identical headings of the individual fragments, no matter which section these belong to). For the Cuna everything is "Historia" or—retranslated—Tatkan ikala. Only "intellectual" Cuna with a special education doubt the truth of the first section. For them history begins only with Ipeorkun (Nordenskiöld 1938: XVIII; Marshall 1950: 202; Norden-skiöld 1930 b: 673).

Starting from the hypothesis of Bowra (1967: 103 seq., 129) that each of the early songs (in the typology of evolution) has only one theme (sceneme)

and that all larger forms appeared later and are originally the result of the combination of several songs (which turned out to be likely already with the epic), the Tatkan ikala also seems to be such an amalgamation. Some of its components are former "myths", some are reports on important events as recited at the beginning of a meeting, which, analogous to the Entertainment-Epics have been passed on because of their special quality or their important content; these are continuously supplemented by history itself. (Also Christian motifs have provided some components (cf. Reverte 1961: 83).) As they are linked together in one unit, these components (in a genetic sense), lose their original character: as regards the microstructure they are all determined by one common principle of construction; as regards the macrostructure they are not merely a succession of individual sections but are woven into a poetic unit; they all obtain the same function in the social order; they are all assigned to one single contexteme. The high degree of uniformity inspite of the heterogeneity of the materials corresponds to that which Jolles (1965: 68) has stated for the European legend. The materials have come under a new principle of construction; they have lost their mythical, historical character, they have been literalized—like for instance the Greek myth in post-Homeric time.

However, as no complete version of the Tatkan ikala is recorded, it is not quite clear whether it is actually understood as one single work, or whether it rather formed a unit like the great European legendary cycles (Atrids, Nibelungen etc.) of which the audience is always aware as such but which has not (or not yet) found its expression in a poetic unit.—However, one thing is certain: the Tatkan ikala is a texteme which—in contrast to all others—is always (?) realised in sections. The resulting text can be completely different, completely identical, or partly overlapping sections—but they must always treat a coherent section of the Tatkan ikala, they cannot flit from one period of time to another. Nevertheless individual narrations—in strict analogy to the microstructural expansions of sentences—may be expressed in sections of differing length. (Thus for instance the Ipeorkun-episode takes one sentence in 2.1.0.3 and 22 printed pages in 2.1.0.5.)

The texts of the texteme are realised according to their intentional function. A text is recited on a concrete occasion, it must allow a statement applicable to the concrete case; on this basis a section is selected from the texteme.

Macrostructure of the Tatkan ikala

The macrostructure of the Tatkan ikala differs in some respects from that of the epics and of the Simple Texts. The differences can best be illustrated by a comparison with the epic: in the Tatkan ikala in general no scenes are built. The basic attitude of the narrator is not—in contrast to the epic—that of someone who describes, but of someone who reports (cf. Kayser 1964: 153 seq., 181 seq.). Actions, “great” events, are narrated in broad outline. Objects are mentioned only if they are of direct importance for the action. The persons are not described, the narrator only mentions their names, their kinship relations, their exploits and (if necessary) their teachings. This is connected with the fact that the action of the Tatkan ikala, in contrast to that of the epic which predominantly develops in space, develops in time. In the epic the time of the narration coincides with that of the narrated material, not only is it of the same length as the latter, but it also runs parallel with the recitation—at least apparently; the place of the action, however, changes: on this the structure of the action is based. Conversely, the action of the Tatkan ikala develops at a place of which in general no details are mentioned, but covers the whole period from the beginning of the world up to the present time. The coherence, which in the epic is often guaranteed by means of a continuous passage through the space of the external world, in the Tatkan ikala is achieved by means of a continuous passage along the time which is supported by narrative means which are also subjected to the category of time, such as the prediction of future events by seers and the explanation of former events by preceding ones which in the singer’s recitation a wise man narrates to the people.

Despite these fundamental differences in the basic orientation the same principles of construction apply to the macrostructures of both the epic and the Tatkan ikala. While the macrostructure of the epic is determined by the principle of realising few scenemes in a large number of scenes, the macrostructure of the Tatkan ikala is determined by the fact that a few stories (plots in the sense of the science of literature) are narrated about several persons, i.e. that many variations of a narrative are formed.—The substances of the macrostructures of the epic and the Tatkan ikala are different: on the one hand objects in space, which are described, on the other hand actions in time, which are narrated. The principle according to which the substances are arranged, the arrangement of equivalent elements in series, is the same in both cases.—Thus a cover term for plot and sceneme—say *motifeme*—could be introduced. This is a purely ter-

minological question; the difference of the substances seems so significant that it should not be diluted—in particular as it entails an essential difference in the mode of operation of the genres.

The macrostructures which are a concrete result of the syntagmatic arrangement of the substances are different in the epic and in the Tatkan ikala: while in the epic a sceneme is not repeated immediately after itself, in the Tatkan ikala equivalent plots are without gaps arranged in cycles, two cycles being equivalent only rarely.

With reference to the terminology of Kayser (1964: 356 seq.) one might call the epics “space-epics” and the Tatkan ikala an “epic of events”.

Content of the Tatkan ikala

Already in 1640 the missionary Adrian de Santo Tomás complained about the non-uniformity of Cuna traditions: “que unos enseñan otros niegan” (Salcedo 1908: 124 seq.) and explained this confusion which he thought “diabolic” as follows: “por vivir unos apartados de otros sin alguna comunicazi3n ni polic3a” (Salcedo 1908: 125). In fact, even today the different versions of the Tatkan ikala differ considerably also in content (cf. Nordenski3ld 1930 b: 677). Above all there is a changing emphasis on Mother Earth, the sun-god and the Christian-influenced high god which varies according to tradition. In addition there is historical evidence of a change in the structure of the kinship system (see § 10) which has caused an almost hopeless confusion among the kinship relations of the first men as represented in the Tatkan ikala.

The content of the texteme Tatkan ikala can best be reconstructed from the tradition of Nele de Kantule, to which most of the known texts belong:

The first man was Olopilipilele, a son of God. He had two wives, a white one and a brown one, and numerous sons. These first men lived in an “uncivilized” manner, like animals. A grandson of Olopilipilele had secret intercourse with his sister, who later on became the moon. From this incest several sons originated, the sun (Ipelele) and the planets. Ipelele becomes the first moralizer and the bringer of culture. Together with his brothers he has to undergo numerous fights against “wicked” enemies, he travels to the underworld, fells the tree of life, and thus wins important cultural values for the men. He is still followed by a number of powerful shamans, partly sent by God. But the men deviate from the way they have been told to go and become again “like animals”. In this process God devastates the earth successively by storm, darkness and water. The flood catastrophe occurred 800 years ago. Next comes Ipeorkun, moralizer and bringer of culture like Ipelele, a prototype of the great neles (shamans) who appear later. He comes from heaven with an olopatte (a flying plate of gold)

and lands in the village of Yeye. He teaches the Cuna almost everything that makes up their culture today. Before his death he predicts the advent of ten great neles.—All of these then appear in the same way as Ipeorkun. They meet at Yeye and decide to explore the world. Seven years later they meet again at Yeye and report on their travels. (These ten narrations form a cycle the parts of which have the same relationship as the scenes of a sceneme.) A few generations later a similar group of neles forms, who decide to go to the external world and bring further cultural values. Most of them fail, however. (The sections of these two cycles are narrations of journeys into the external world and have the same macrostructure as the epics. Thus in this case the otherwise predominant orientation of the Tatkan ikala on the basis of the category time is abandoned and the category space is placed into the foreground, while time as a superior principle as, however, maintained.)—For the Cuna a period of migrations and wars with other tribes begins. They found villages. Often there is a shortage of women or of men. To overcome this shortage the lacking people descend from heaven on olopattes. (Thus again a cycle is formed, this time, however, its sections are grouped around certain villages.)—Finally the Spaniards invade the country. The Cuna offer fierce resistance.

Function of the Tatkan ikala

The expression "Tatkan ikala" is used almost synonymously with "uanaet", admonition (Holmer 1952 a). In fact the function of the Tatkan ikala as a means of social control can hardly be overlooked and has often been recognized (Gasso 1912: 250; Puig 1948: 77; Marshall 1950: 260, 187; Reverte 1961: 80; Stout 1947 a: 30 seq., 41; Wassén 1949: 50).—For a construction of the texts the interpretations of the arkalas can be consulted. However, here we are not interested in the contents of the constructions (the norms), but in the way norms, of whatever kind, are expressed in literature; conversely: in the way literature transmits norms.

The interpretation of the first verses of 2.1.0.2 says that we are all descended from the first man (Olopilipilele), that we are all brothers and have to behave like brothers, help one another, love one another, etc.

One of the great neles, Kupilele, claimed to have been in the eighth underworld and to have seen God. The crowd followed him, only another great nele, Purpakana, kept silent. When the followers of Kupilele mocked him, he said that nobody was able to see God. To settle the dispute the two neles went to the underworld in order to see God; but it appeared that it was not God whom Kupilele had seen, but the king of the devils (2.1.2.4).—When Inapakinya wanted to cede the supreme authority over the Cuna to the government of Panama, his political opponent, Colman, told the story of Kupilele, ending with the words: "Now the same thing happens again which happened to our great ancestors, when the chief Inapakinya says that the Panamanian Government shall be our father." (2.1.4.6 a)

In the first case the interpretation is given by deducing from one statement another one immediately containing an instruction; in the second case we have a conclusion by analogy. A third type of the transmission of norms is found in the Ipeorkun-episode (2.1.0.5), which contains a direct appeal which carries weight because it is pronounced by an authority. The fourth and last type is that of deterrence, as for instance in the episode on the annihilation of the world or in the narrations of the atrocities of the Spaniards (2.1.0.3, 2.1.0.5), where simply the consequences of disregarding the norms are shown.

All four modes of transmission, in particular the first two of them, which are the most important ones, presupposes a process of reasoning. Under the assumption that the content of the Tatkan ikala is historically true the interpretations are definitely a form of rational argumentation. For the Cuna history is more than facts, it is an example, a lesson. The Tatkan ikala essentially is not a non-transparent secondary semiological system, it contains few or no symbols (except for the first part). No identification of the listener is required; on the contrary: the narration invites criticism and encourages direct action in the real world. While the epics influence the subconscious through symbols, the historical texts impress the conscious mind through arguments. Both are attempts to change facts through literature, to establish practice.

The importance and the value of history as a political argument are particularly evident in the texts that originated in connection with the revolution (e.g. 2.1.0.3).—The frightening atrocities of the Spaniards and Frenchmen, their hypocrisy and their violations of treaties, the fatal teachings of the priests, who come only to pave the way for the soldiers are chronicled almost without comment. Even the idle talk of the superiority of civilization is unmasked as an imperialist fraud (2.1.0.3, p. 216). Nevertheless, politically very subtle distinctions are made in the assessment of the whites, seeing, say, Colombia (in 1903) as “no longer Spanish” while calling reactionary Panama “Spanish” (2.1.0.3, p. 208).

However, the Cuna poetry never completely dispenses with symbols, with “myths”. The episode of Olopipilele, the first man, is for instance again a non-transparent secondary semiological system: a social fact—“the Cuna are a social group”—is symbolized by a biological one—“all Cuna are descended from a first father”. As already mentioned, enlightened Cuna do not “believe” in this.

Conception of History of the Tatkan ikala

The—basically rational—perusal of history in search of guidelines for ways of acting indicates a very marked sense of historical awareness and presupposes a comparatively authentic tradition which is not susceptible to arbitrary manipulation. However, as a consequence of this one would expect the Tatkan ikala to contain also elements that are beyond a functional interpretation. In fact, many such elements are found, and exactly in those passages where one would perhaps least expect them, in the teachings of Ipeorkun, which indisputably contain facts relating to the history of culture, norms which the Cuna abandoned already a long time ago and in the reintroduction of which certainly nobody is interested (e.g. an Eskimosystem).

Thus the Tatkan ikala is primarily a tribal and cultural history (interwoven with mythical elements, and in which dates—not least because of the absence of a developed calendar—either lack completely or are rather questionable (cf. Wassén 1949: 95)), and only secondarily is it a collection of—real and imaginary—experiences which serve as a guideline for social and political behaviour. An intermediate position between the two functions of the Tatkan ikala can be found in the outlines of a philosophy of history contained in it, which is clearly evolutionist, but does not expressly consider the present to be the climax of development and contains no expectation of a final age.—The conception of history of the Tatkan ikala is expressed very clearly in an interpretation of the first parts—from the beginning of the world up to the great neles—of the Tatkan ikala:

“Ya sea los primeros seres inmorales o sea animales. No hablaban sobre la idea de Dios, tampoco tenían ideas. Ya que la idea del mundo de los Cunas este lo mas elementar o lo mas perfecto. Vinieron a poblar las gentes inmorales; luego va perfeccionando poco a poco a los mas perfectos seres humanos.” (2.1.0.2.)

For the Tatkan ikala the idea of evolution is not accidental but of central importance: the uncivilized first men are followed by bringers of culture, discoverers, moralizers, who first come as individuals and then in groups. They occupy by far the largest part of the work. Their representation is of decisive importance for the macrostructure. Their actions are determined by the desire to obtain information on the structure and history of the world, to transmit their discoveries to the people. Only in the course of the Spanish invasion do they lose somewhat in importance.—The Spaniards, like other non-Cuna, basically do not influence the conception of history, and as intruders they play a similar part as the demons in the space-oriented conception of the world found in the epics.

The evolutionist conception of history on the one hand may be seen as a real historical process—the gradual evolution of Cuna culture, on the other hand it can be regarded as a self-interpretation—as a morally superior “race”—which, in turn, certainly influences the actual behaviour.

Pap ikala

As regards the macrostructure, *Pap ikala* (2.2), “the way to God”, occupies an intermediate position between the epic and the *Tatkan ikala*. Both narration and description are found in it; the narrated period is not related to the moment of narration—the events may occur at any time—but for the audience, in view of the actual situation of the recitation, it lies in the future. We are told what can happen when a person dies, how he reaches God “in heaven” through the realm of the dead. In this respect the content of the *Pap ikala* is almost identical with that of the *Epics for the Dead*. But the emphasis is on a completely different aspect in each case, while the *Epics for the Dead* give a description of what happens, the *Pap ikala* enumerates what will happen under which conditions. If the dead has infringed upon certain norms he will go one way—and he will receive frightful punishment—if he has complied with these norms he will go the other way—and he will receive marvellous rewards. In addition, an extensive system of control is described, which registers even the smallest misdeed; the entire course of a person’s life is recorded in books, and he must pay for every wicked deed. All this is clothed in a very detailed and vivid description of beautiful landscapes and magnificent palaces, so that the resulting moral lecture is not too obtrusive and at the same time certain conceptions of paradise, become visible, connected with the mythologeme of the reversed world (Mühlmann 1964: 340 seq.), which is confined to a reversion of the property relations of whites and Indians. In the realm of the dead the white man is poor, the Indian is rich; in the beyond railway trains, telephones, lifts, etc. belong to the Indians.

Despite all this, the *Pap ikala* is nothing else than an instrument of norm control, which the *sailas* use very consciously and with definite purposes. On this unambiguous evidence is given by the singers themselves: “All this is explained to the *Tules* (the Cuna) by their chiefs (the *sailas*) at the meetings in order that they may observe a good behavior” says, for instance *Nele de Kantule* (Nordenskiöld 1930 a: 41), who himself does not believe in the beyond: “. . . these are for *Nele* only stories which he tells to the common Indians, in order to have them believe in them and have their

morals built up by them . . . He confesses to the specially initiated that he doesn't know where the human souls go when they die. 'Nobody knows the souls fate after death'". (Nordenskiöld 1938: XVIII; cf. Nordenskiöld 1931: 589; 1938: 293; Marshall 1950: 202, 204; Reverte 1961: 85); "Nobody has seen God; we know nothing about him" (Nordenskiöld 1931: 589; 1938: 293).

The educated Cuna are well aware of the difference between their own belief and that of the people (Marshall 1950: 203).—If one of the non-initiated should doubt the truth of the Pap ikala, also the saila of the Cuna, has a proof of the existence of God at hand:

"If a person does not believe in it, you can confute him by setting him the following problem: Look at the stars, which are the work of God, that is to say everything we see in this world has been created by God, and consequently we must all believe in the existence of a Supreme Being; i.e. the Supreme Being is the one that leads us to be of good behavior . . ." (Nordenskiöld 1930 a: 44).

Of course, it is very well possible that the Pap ikala and the different degrees of truth it is attributed, varying with the level of education, are the result of a process of acculturation. But the tradition tells us—its reliability in such matters has already been mentioned—that already in the early period there were medicine men who thought that there was no life after death (Nordenskiöld 1931: 589; 1938: 293). On the other hand, of all Cuna those who graduated at e.g. the college in Panama-City, and who would be the first to be considered acculturated, are reported to have a firm belief in the Pap ikala (Nordenskiöld 1930 b: 676). Moreover during the whole time of their contact with the whites the Cuna will probably have discussed religious matters rather with missionaries than with pirates and traders. But that the missionaries should have proclaimed an atheism of the initiated is very unlikely. In addition, similar information is recorded also in other indigenous cultures of America, e.g. the Aztecs (Sahagun, Lib. X, Cap. 29). However, it is possible that cultural contacts in this respect play a part, not as a means of diffusion, but as a precondition of the realisation of the diversity and the contradictory character of the religions, i.e. of their culture-specific nature, as this is one of the possibilities for the self-contained conceptions of the world to be shaken.

Animal-tales

Animals are attributed human properties and they are not mentioned as members of their species, but are given certain names. These names occur also in the first section of the Tatkan ikala (e.g. 2.1.0.3, p. 148), but the

corresponding stories are not told in this context. Since the tales are often of the same type as can be found among other tribal peoples as “myths” (“how fire came to man”, etc.), it can be assumed that the animal-tales originally belonged into the context of the usual narratives of the Tatkan ikala and thus also claimed to be true as myths do in general. Moreover certain other narratives of a definitely mythical character—felling of the world tree (2.1.1.9–10), origin of the heavenly bodies from an incest (2.1.1.5–9)—can be found both in the Tatkan ikala and in connection with the animal-tales—and thus with purely entertaining function. But in general the animal-tales do not claim to be historically true (Wassén 1934 a: 18).

In the mythology of many tribal peoples (e.g. the Navaho) in the primitive age the world was inhabited by animals, who had not yet the intellectual faculties of a man (Reichard 1963: 13 seq.). This conception obviously exists also among the Cuna, but they understand it only metaphorically—“man acted cruelly and wickedly, like animals” (2.1.0.3, p. 164)—and the origin myths about the animals of the primitive age are secularised and have become entertaining tales. Thus the process of demythicalisation, i.e. of a transformation of the myth into literature (as fiction), which can be generally observed among the Cuna, can also be stated in the case of the animal-tales.

A large part of the motifs contained in the animal-tales can be traced back to the 17th century (2.1.0.1) (cf. Wassén 1934 a). A comparative study of the anthologies of the last 300 years shows a certain stability of the tradition, but by no means a stagnation, for some of the motifs which in 1640 appear in 2.1.0.1 are no longer found today, others occur in modified form, many of today’s most popular motifs do not appear in 2.1.0.1.

There seems to be no difference between the numerous recorded prose versions or statements of content of the animal-tales of the Cuna and the animal-tales that are known all over the world. A translation into another language would make it impossible to recognize the Cuna tales as Cuna literature. Thus they would become accessible to the methods of structuralist interpretation as developed by Levi-Strauss (1964; cf. Yalman 1967) and Dundes (1964) on the basis of the work of Propp (1958). Since almost nothing is known about the microstructures of myths because of the prevailing interest of mythologists and myth collectors in the contents or macrostructures (in a restricted sense), it is impossible to decide whether the specific microstructure of the Cuna animal-tales are a result of the process of literalisation—and thus relatively rare—or whether the myths

of other peoples show certain macrostructures that go beyond the purely statistical peculiarities of the language in which the myths are narrated. In the latter case the microstructures would be unknown only because of a general lack of interest on the part of the collectors. The decision of this question would lead to an examination of the structuralism of the Lévi-Strauss type; for, if universal pattern of thought are expressed in the macrostructure on the myths, there is no reason why they should not appear in the microstructures, which are equally dependent on (or independent of) the linguistic structures. Should the microstructures of the Cuna animal-tales turn out to be rare for a material that in view of its macrostructure must be classified as myths—and this is most likely—there would be an increased necessity to establish a theory of the intra-cultural diffusion of structures, which would have to supplement the merely structuralist explanation of the structure of the myths: the motifs of myths, as elements, are subject to the process of intracultural diffusion (which explains, though not completely, why they are so wide-spread). In this process they come under the influence of principles of construction that give the elements culture-specific arrangements at the macrostructure-level and a culture-specific expression at the microstructure-level by exceeding their original field of application, the literature, and incorporating the new material into it. For this purpose they have to adapt themselves to the shape of the new material and this, in turn, can have an effect on the principles of construction themselves. (This may be regarded as a theoretical explanation of the experimentally found culture-specific changes in the intracultural diffusion of tales (Bartlett 1965) at the structural level.)

Syntactically, the macrostructures of the Cuna animal-tales can readily be analysed by means of the method of decomposition into motifemes and motifeme sequences developed by Dundes (1964: 61 seq.).—The four-motifeme-sequence “Lack/Deceit/Deception/Lack Liquidated” or extensions of it are then by far the most frequent. The motifeme sequence “Interdiction/Violation”, which play a central part in (say) African animal-tales (cf. Kramer, MS), in Cuna-animal tales hardly occurs at all. This is probably connected with the fact that, in contrast to the African ones the Cuna animal-tales have no explicit social function, which is, as already mentioned, performed by the Tatkan ikala and the Pap ikala. Also the nuclear-two-motifeme-sequence, to which Dundes attributes a decisive part in the morphology of North American tales (Dundes 1964: 61 seq.), is not very marked in the Cuna tales, the motivation for the Deceits is much less clear than in the North American correlates, probably because

the procurement of food and other goods is no great problem in the well-balanced economic system of the Cuna, and because—even if some of the animal-tales contain the usually obligatory so-called explanatory conclusion (cf. Malinowski 1954: 109 seq.)—the origin of the cultural values is narrated in the *Tatkan ikala*.

The Deceit/Deception-motifeme-sequence itself shows no unexpected properties except for its unusual domination of the other sequences. The cunning animals are the small and weak ones, the outwitted animals are the big and strong ones. This relationship requires no direct deduction from social needs (cf. Bascom 1965: 298; Herskovits 1948: 421; Lévi-Strauss 1967: 227 seq.); it results from the logic of the sequence itself, for the strong animals need not resort to a ruse in order to assert themselves against the weak ones.

Greenway (1964: 91 seq.) is of the opinion that the unsophisticated narrators of the tribal peoples narrate animal-tales only because they are incapable of representing human characters. Following Andrew Lang, he believes the primitives to be particularly near to the animal kingdom.

9. SIMPLE TEXTS

Simple texts, which the Cuna in most cases call “*namakketi*”, are texts with only one scene. They can be subdivided according to contents, and contexts or functions.—A subdivision according to contents does not yield clearly defined classes, but poles between which the texts are more or less continuously arranged. It would be conceivable that originally there were text classes of different content which influenced one another to such an extent that the distinctive features disappeared gradually—a process which was not likely to encounter relevant resistance since the meanings and functions were not effected by the fluctuation as the contextemes could always guarantee an unequivocal function of the texts.

A subdivision according to contents yields the following types: (1) *saila ikala*, texts on the origin of things (3.1); (2) *uanaet*, admonitions incantations, conjurations (3.2); (3) personal texts (lyrics), in the Cuna language always called “*namakket*”, relating to the singer himself or to his environment (3.3). (2) would correspond approximately to type D, (3) would correspond almost exactly to type E of the Chadwicks’ classification (cf. Chadwick 1932: 28, 42, 60 etc.; 1936: 2; 1940: 696). However, this would not necessarily imply an exclusion of texts of non-personal content. What is striking above all is that the Chadwicks’ type D (panegyrics, elegies, hymns,

prayers, exhortations) occurs only to a very limited extent, so that also its characterisation as "celebration or appeal" is not applicable to the Cuna. The reason for this is to be found exclusively in the religion and in the absence of heroism of any kind (which is of no further relevance in this context). The borders between these types are diluted 'above all by the considerable fluctuation of actemes between the corresponding text groups.—The Cuna believe that one can obtain magic power over objects only if one knows the origin of these objects. This is rationalised by the idea that the origin of the objects is their creation by Tiolele (God) (Nordenskiöld 1938: 393, 612; Wassén 1938: 143, Stout 1947 a: 44, Holmer and Wassén 1958: 16 seq.), that Tiolele created each object to a certain end—and always for the benefit of man—and that this end is known to the object. If the object (which is conceived of as animated) is reminded of its origin, it must consequently also remember its task and obey him who knows its origin (cf. Nordenskiöld 1932; 1938: 650 seq.). However, if the origin of the objects is attributed such importance, one must expect the reflection on the origin to play a part also in the incantations and even in the personal poetry, which means that in wishful ideas (as in the incantations) and in simple descriptions of objects that are of great subjective importance permanent reference is made to the origin of the objects that are desired or felt to be significant. In the incantations, wishes, which syntactically and semantically would require the optative mood, are recited in the indicative mood, so that statements on facts (descriptions of objects) as in personal poetry result. (Here we have not to assume a fluctuation since the optative mood as indicative mood can be explained psychologically (cf. Burke 1966).) Now actemes fluctuate back from these descriptions to the *saila ikalas*, so that in the reflections on the origin of the objects reference is made to their actions and properties. Finally, the structural differences between the three text groups can be reduced to the differences in the semantic structure: (1) "Tiolele has decided that x is the case"; (2) " x is to be the case" in the form " x is the case"; (3) " x is the case". Beyond this, there is of course a quantitatively different distribution of the actemes over the three text groups.

A more clear-cut classification of the Simple Texts, which, however, largely coincides with that according to text-inherent criteria, is that according to contexts and functions:

The *saila ikalas* are of great importance in the first place before undertakings the success of which is doubtful, such as the administration of medicine or hunting. They then have an exclusively magic function, i.e.

that of ensuring the success of the planned action. They do not serve the purposes of intrahuman communication, they are not recited, but only "thought" without using the vocal organs (naturally with the exception of those cases in which a teacher passes them on to his disciples).—Texts that stress the importance of the knowing the origin of things are found not only among the Cuna, but are fairly wide-spread among tribal peoples (cf. Wassén 1959: 502).

In contrast to the *saila ikalas* the *uanaets* (3.2) are recited aloud. Although they also have a magic function, insofar as they are intended to exercise a positive influence on the course of certain events, they perform a clearly psychological function. While the *saila ikalas* are "thought" before an undertaking, the *uanaets* are sung during the undertaking itself, so that they can function as work-songs, as it were.—Three groups can be distinguished. The texts of the first of them (3.2.1) are sung by medicine men and as admonitions are addressed to the spirits living in the medicine, explaining to them their task; the medicine men explicitly makes a diagnosis of the illness to be treated and describes the (imagined) actions of the spirits.—The texts of the other group (3.2.2) are sung by people who embark for hunting or seeking food. They often have the form of discourses pronounced by the sought objects, which, on the one hand, deplore that they will soon be pulled out of their familiar environment, but, on the other hand, remember that Tiolele destined them for human nourishment and that they must put up with their sad destiny. The function of these texts is not least that of soothing the conscience of the hunter, as the Cuna stands in awe of killing (cf. Nordenskiöld 1938: 382 seq.). Both types of texts have in common that the recitation makes the audience conscious of the actions that will be carried out immediately afterwards, makes the listener realize their importance and consequences, and explains them to young people who are possibly present.—The texts of the third group (3.2.3) have again a more magic character. Their purpose is the protection from dangerous or irksome animals (wasps, snakes, etc.). In most cases they describe the destruction of the animals, in particular the annihilation by the *wekkobird* of the poisonous snakes which are extremely numerous in Darién.—Gassó (1912: 253, 57) and Pittier (1912: 652, 655) report the existence of songs dealing with the constellation of the stars, the times of the year, and agriculture. These texts probably belong to the *texteme*-class 3.2. and could form a group 3.2.4 to which perhaps the *textemes* 1.1.3 B, C, D belong. Unfortunately, no further information on these songs is available.

According to the tradition of the Cuna (e.g. 2.1.3.5) in the time of their migrations and village foundations numerous women descended on golden plates from the sky, married Cuna men, and had children with them. When one of her sons died, one of these women, Olonatili, invented the poet ("screaming") and at the same time the lullaby (2.1.3.5). These lullabies (3.3.1) are since that time the property of the women. As regards their form, they are a transition between the uanaets and the personal poetry. In their "poetricity" they come near to the European understanding of poetry. Their content deals with the situation of the child, its future fate, the work it will have to do later on, the work of its father, and that "mythical" origin of the women:

"We are such who do not know the earth, inhabitants of the golden way of the stars, inhabitants of the golden way of the stars" (3.3.1.6).

According to Tinnin (1940: 27) the lullabies deal also with themes that are usually reserved to the Tatkan ikala, i.e. with the history of the Cuna.— In the lullabies the expression of human relations, especially of those between mother and child, and between men and women is of an astonishing delicacy and variety, which are quite open to our own spontaneous understanding.

To an even greater extent this applies to the "lyrics" (3.3.2) themselves:

I rise into the air, I rise up to the sky,
 rise into space, into space.
 I go up the silver radio-mast, rise into space,
 into space.
 I rise along the golden radio-mast, I rise into the air,
 rise into space, into space.
 I rise along the golden noise-radio-mast, i rise into the air,
 rise into space, into space.
 Along the silver noise-radio-mast I rise, rise into the air,
 rise into space, into space.
 I rise into space, rise up to the mothers of the golden filters,
 rise up to the sky.
 I rise into the air, rise into another world,
 rise into space, into space.
 I rise into space, rise up the sky to see the bodies of the mothers,
 I rise up to the houses of clouds,
 rise into space, into space.
 I rise into the air, rise up to the sky,
 rise up to the great mothers of the winds,
 rise into space, into space.
 I rise into the air, rise up to a hole in the clouds,
 rise into space, rise into space. (3.3.2.1)

The textemes of the genre Simple Texts all have the same macrostructure insofar as they all consist of only one sceneme. For reasons of content the textemes of one contexteme are more or less equivalent. Since a text in a contexteme is not experienced by the listener as isolated, but in relation to all other texts he has heard before in the same contexteme, including texts of different textemes, there is also a subjective impression of this equivalence. In this sense we can say that the Simple Texts as chains have a complex macrostructure. The arrangement of equivalent and non-equivalent scenemes is subject to the construction-principle of variation, which is fundamental for the whole literature; but in this case it is already a non-literary principle, one of the social order.

CHAPTER III: LITERATURE IN CULTURE AND SOCIETY

10. LITERATURE AND CULTURE

Main Principle of Construction of the Literature

The literature of the Cuna is generated by a system, the *p*-theory. For the formation of poetic texts the *p*-theory is added to the grammar (in the broadest sense), giving the texts, in addition to their linguistic structure, a secondary one, the poetic structure. This is done by admitting only certain sentence structures, by assigning to each syllable an additional quality, the pitch, by determining the order of the syllables, by regulating the syntactic and semantic relations between the sentences, i.e. the discourse structure, by making a selection from the lexicon of the colloquial language, or by inserting entirely new expressions. The *p*-theory is governed by a principle of construction that operates at all levels of a text, bringing about a uniform quality of all levels of texts and of all texts in general. The extent of the application of the principle is limited by the rules of the *p*-theory and the context, but nevertheless determines the general properties of the structures of the texts and thus the "style" of Cuna literature. When considering the context it must be understood as a maxim, if not, it applies absolutely. If it is regarded as a maxim, the quality of a text increases in comparison with that of other texts of the same texteme in the same measure as the maxim is fulfilled. The fundamental principle of construction can be formulated as follows: Among as few elements as possible as many relations as possible are to be established, i.e. as complex a structure as possible is to be produced, whereby repetitions are to be avoided; one might also say: Birkhoff's quotient for one text—within a system of rules—should be as large as possible. The effect of the principle of construction is that on the one hand a unit is given as manifold a structure as possible, while on the other hand a linguistic structure (e.g. a sentence structure) is reproduced as often as possible, in each reproduction the structure being filled with the same elements except for one in each case (if necessary also a group) which is exchanged for another one in each reproduction; or, in the case

of pitches, one element (if necessary several) in a sequence being multiplied in the repetition of the sequence. This process arranges n_1 equivalent elements in a series. The same process reproduces the series in a metaseries of n_2 equivalent series, etc.—until the possibilities determined by the language and the requirements of the theme and the context are exhausted. Logically, the only form of a complete combination of sets is the formation of covering sets. This is exactly what the p -theory prescribes for all cases in which it is possible.

The fact that the fundamental principle of construction of the Cuna p -theory is expressed at all levels of the structure cannot be explained by saying that the application at one level entails that at another level. The latter statement does not apply: one can, for instance, conceive a text, the verses of which consist of n subverses each containing 2 verse sections.

The p -theory outlined here is certainly of a rather general nature, but it is already so specific that it can obviously only generate Cuna literature. Which, then, are the relations existing between the theory of Cuna literature and the theories of other sectors of Cuna culture?

Main Principle of Construction of Music and Art

The cultural sectors nearest related to literature are the other systems of expressive culture, i.e. music, art and dancing. (As there are no other reports on dancing than impressionist ones, which do not allow a structural analysis, investigations must be confined to music and art.)

Although, next to linguistics, the ethnology of music has dealt with structural problems most intensively, no structural analysis of the Cuna music exists (except for some unsatisfactory attempts at analysis) (Densmore 1925/26; Krieger 1926: 115 seq.; Garay 1930). As the Cuna pan-pipe music is particularly rich in content it cannot be dealt with here except by using examples which we may assume to be substantially representative and which expose the underlying principle.

Each passage of a piece of music which is either repeated exactly, or in such a manner that the differences between its notes are the same, although the notes themselves are different (whereby some notes or note sequences may also be multiplied) i.e. a passage which is repeated equivalently is indicated by a capital letter. Passages which are the same will be denoted by the same letter (X, X), and equivalent ones by a stroke: (X, X').

Some examples:

ABB'ABC

ABB'AB"C' (Densmore 1926: 9(a))

AB/AB/AB/AB

CACAC'C"C'C"

ABABABCC'CC' (Densmore 1926: 9(b))

ABBABB

CDDCDD (Graetz 1958: 2nd part of the flute music, No. 4)

AABBAABB

A'A'B'B'A'A'B'B'

AABBAABB

A'A'B'B'A'A'B'B' (Graetz 1958: 2nd part of the flute music, No. 3)

It immediately becomes obvious that the pieces of music may be taken as analogous to the verse groups; the lines then correspond to the verses and the melodic sections to the subverses in so far as we are still dealing with isomorphic sequences, or rather to the verse sections in the case of an echo rhyme. Furthermore: pieces of music and verse series (verses) may be understood to be interpretations of one and the same matrix; or, if one prefers the description by operations, one might state that the structures of music and literature are generated by the same, or rather similar operations. The pitch sequences of poetry in particular present an uncomplicated special case of pitch sequences in music.

The same principles of construction govern, in the main, the systems of literature and music. The contents of the chain structures and some additional rules are different.

The art is reflected mainly in wood sculptures, in the appliqué work on the women's blouses, the molas (cf. Krieger 1926: 108; Brown 1925: 146; Björnberg 1961; Holmer 1952 a: 76; Wassén 1964, 1968; Pérez 1942). The rectangular surfaces of a mola can be divided into parts which figure in certain relations one to the other (form different kinds of symmetries). These parts in their turn consist of elements which differ from one another in at least one feature. Therefore, for instance, they might consist of elements of the same form but of different colours. If an element has many colours at least one part of each element in the series—whether corresponding or not—is different in colour from another part of all the other elements in the series. Alternative possibilities for variation are the size and form of the elements; in the same way elements of one series are related to another series in the same mola.

It is clear that these structures can be understood by means of the appli-

qué technique. If the appliqué pieces were cut according to a stencil it would be even more reasonable that all the elements in a series be identical, or at least that they have the identical form and size, if not the same colours. Also the vagueness of the number of elements in one series can no more be explained by this technique than the lack of dualistic principles of construction etc. If one compares the patterns of the molas with those of other pieces of material these deviations from otherwise "more regular" pattern formations are particularly striking. Even in the case of peruvian textiles, the patterns of which are surprisingly like those of the Cuna (as far as the structures are concerned) only the colour is subject to variation, not the size and form.

In the case of sculpture similar principles are easily revealed if one does not consider single figures, a process which is justified by the fact that the figures are not only placed next to each other but also produced in series (cf. Krieger 1926: 73 seq.; Nordenskiöld 1938: 423 seq.; Wassén 1938: 149; Galvez 1952: 57 seq.; Keeler 1955 a; 1956 a; 1960: 202 seq.).

It may also be said: the same structures which are audible in literature and music are presented visually in art. The strictness with which the principle of construction of variation is applied to all aspects of elements is sufficient to differentiate the structure of Cuna art from that of the art of any other ethnic group.

Principles of Construction of Kinship Terminology and Botany

If we follow Lévi-Strauss' example (1967 :68 seq.) and examine the kinship system, certain difficulties become apparent. One expression only stands for father's sister, mother's sister and both daughters, a second one for both father's brother's daughter and mother's brother's daughter and a third for the sister (cf. Stout 1947 a: 113 seq.; Marshall 1950: 169 seq.). This is a hitherto unknown system the complexity of which must lie approximately in the middle between the Hawaii and the Sudan systems. It is not possible to present the rules of marriage in a mechanical model, only in a statistical one (apart from the simple incest taboo). Thus Lévi-Strauss' "metastructure" would fail at this point. It would, however, apply to all other termini except those already mentioned. Namely, the remaining kinship terminology may easily be termed descriptive. It consists of a wealth of expressions which are all composed of a few morphemes, whereby the manner of combination is analogous to the expressions employed to describe kinship.

At least one other system is constructed according to the principle under

consideration—botany. Besides plant names in colloquial language there is a botanical classification system used by the medicine men, a system whose rigid structure is in no way inferior to that of Linné. Although it is still to a great extent unknown, it can be taken to be true that all plants are divided into classes and subclasses according to such criteria as foliage, ramification, type of roots, place of growth, size, colour etc. (cf. Kramer 1967 a: 580 seq.). It might of course be argued that no principle of construction is necessary to explain a classification system of this sort as in this case the simple properties of nature are merely reproduced. However, the objection to this lies in the fact that the plant names have a construction analogous to the system, which, as we know from our own botany must not necessarily be the case. Namely in the technical language plants are named by stringing together morphemes, which each apply to one criterium (so that their absolute number is not too great), thus developing long words, the analogy of which occurs in writing in a combination of not more than 7 elements, 7 kinds of combinations and 3 yes/no decisions with which an exceptionally large inventory of complex signs can be formed (cf. Kramer 1967 a: 581).

“Paideuma”

It is apparent that the main principle of construction of literature cannot only be found in all subsystems of the *p*-theory, but beyond, in quite different cultural sectors like music, art, kinship, botany, rituals and probably in many others too.

The cultural sectors in their totality of one ethnic group can be envisaged as being a tension-filled field in which the principles of construction fluctuate, expanding and contracting. This process can lead to one principle dominating others. As cultural sectors can be localised in the minds of the individuals of a culture, the fluctuation of the principles of construction may be regarded as a mental process: while the child is growing up into society it must learn the systems. If one makes the assumption that a mental correlate to Occam's razor applies to the internalisation process (cf. Bierwisch 1966: 128 seq.), then, as long as no other factors (for instance paradigmatic pressure) counteract it, continual simplifications of the structures must take place. If this process is able to take place undisturbed by acculturation and changes in “civilisation” it should result in syntagmatic-paradigmatically balanced systems. The state of mind connected with this could be that which lies at the root of the so-called “geschlossene Kulturen”

(Lukács 1963: 81 seq.). If one makes a synchronic analysis at such a moment, one principle of construction apparently dominates the others. (This, of course, does not mean that the latter can only be the case in “geschlossenen Kulturen”: the system of the structural pressures is only a manner of expansion of a principle of construction.)

If we are to describe a culture with partially isomorphic cultural sectors we can proceed in a manner analogous to the conception of the *p*-theory (i.e. a system consisting of subsystems): all cultural sectors in which one principle of construction predominates (in extreme cases—all existing cultural sectors of one ethnic group) are brought together. It is now possible to find a deep structure which generates the structures of the systems by transformation rules. It may well be that this aim is set too high for the present; however, a basic matrix can certainly be drawn up from which the matrices of the cultural sectors may be derived by additional rules.

The systems themselves then result from these matrices and the corresponding rules of interpretation. This basic matrix for the cultural sectors of the Cuna mentioned has roughly the following form:

$$\begin{array}{c} X_1^1, X_2^1, \dots, X_{n_1}^1 \\ X_1^2, X_2^2, \dots, X_{n_2}^2 \\ \cdot \quad \cdot \quad \cdot \\ \cdot \quad \cdot \quad \cdot \\ \cdot \quad \cdot \quad \cdot \\ X_1^m, X_2^m, \dots, X_{n_m}^m \end{array}$$

Thus equivalent elements can be entered in one line and in one column. “*X*” for instance means a subverse in the *p*-theory, a sequence of notes in music and in art an element of a pattern etc. Additionally, (for the sectors of expressive culture) the maxim—keep Birkhoff’s quotient as high as possible—applies. This shows that although the basic matrix is quite general, it is still so specific that it can only apply to the cultural sectors of the Cuna. A subset of the cultural sectors with a common basic matrix can, also, have common additional rules (e.g. the cultural sectors of expressive culture). In this sense it can be stated that the cultural sectors form a hierarchic order. The hierarchy corresponds with the progressive domination of one principle of construction.

The drawing-up of basic matrices simplifies the description of the structures of cultural sectors of an ethnic group, and this constitutes an application of Occam’s razor. This is possible if the application of the mental correlate of Occam’s razor underlies the structures subject to examination

themselves. The drawing-up of basic matrices would therefore be a reproduction of mental processes.

The basic matrix—and when possible the deep structure—determines the general features of the cultural sectors which it covers, and, in extreme cases, all those belonging to one ethnic group. Consequently, it presents something like the “basic structure of the culture”. Thus may be interpreted as a more precise formulation of the old term “Paideuma”.

Part of the structural features of Cuna literature are thus partially explained, namely that part which it has in common with all other cultural sectors of the Cuna—they are all expressions of the “Paideuma”. This is a concise form of the mentalistic explanations of the structure of literature. Of course at present it is of a very hypothetical nature. Rigorously formulated, that which Lévi-Strauss formulates in a less precise fashion which definitely makes it appear more tempting, is on the contrary, discouraging.

Writing and Literature

Turning to the writing-system, the hypothesis which has been formed appears at first to apply here also. The writing-system is based on the *p*-theory. It suffices to note those parts of a text which do not follow automatically from the *p*-theory. If one has a manuscript the author of which has omitted all the poetically redundant parts of the text and one applies the *p*-theory to the parts noted, a complete text emerges. In order for this to be feasible the author must in fact have internalised the *p*-theory. Therefore one cannot simply say that writing is a cultural sector which has structural features in common with the *p*-theory; on the contrary, the *p*-theory is a prerequisite of the writing-system, certainly in cases where a text has been noted in its minimal form.

But the opposite is the case if the redundant parts of a text are noted: the text structure is then so complicated that it becomes impossible to compose the text “in the head” and it must be established in writing in order to render it possible to survey and correct the construction of the text easily. In this way, writing is a prerequisite of all literatures of which the structure is really complicated.

Consequently, the relations between the cultural sectors of literature and writing are not of a merely abstract, but of a concrete nature. On the one hand the *p*-theory makes a certain writing-system possible (which would otherwise be inconceivable); on the other hand writing makes possible the production of certain, particularly complicated poetic structures (which

would otherwise not be feasible). Thus, under no circumstances can the relations between writing and literature be explained by the "unconscious activity of the mind" (Lévi-Strauss). Furthermore: one feature of literature, viz. its complexity, cannot be explained mentalistically.

11. LITERATURE AND SOCIETY

Economy and Society

The basis of Cuna life is a complex agriculture. They cultivate bananas, pisang, corn, rice, yams, sweet maniok, sweet potatoes, coconuts, cocoa, sugar cane, pepper, tobacco, pineapple, pawpaws, avocado pears and coffee. Agriculture is supplemented by hunting and, most important, fishing. Pigs and chickens are kept for trading purposes (Stout 1963: 257 seq.). The men do the agricultural work, working from sun-rise until mid-day. (Stout 1947 a: 21.) A piece of land is the possession of all those cultivating it together, in some cases it belongs to their wives. Generally speaking, all the men belonging to an extended family work together. (Holmer 1951: 187).

Each Cuna (also each woman) possesses a piece of land. The land belonging to the women is cultivated by their husbands (Stout 1947 a: 24 seq.). Land can be lent but not against payment (Stout 1947 a: 25). Anyone can make whatever uncultivated land is available his own possession by cultivating it (Nordenskiöld 1938: 40). There are no privileges for hunting and fishing. (Nordenskiöld 1938: 41)

Economic enterprises which lie beyond the individual's material capacity and capacity for work, for instance power plants, motor boats, shops, fishing-nets, chicken farms etc. are the property of the village. The products of these enterprises are sold (even to those participating directly in a project, e.g. a fishing expedition). The profits are paid into the village fund (Stout 1947 a: 22; Wassén 1949: 13 seq.). The construction of houses, canoes and roads are also communal tasks, fulfilled by all the men together (Stout 1947 a: 23). The schools, too, are maintained and controlled by the community (Stout 1947 a: 23). It is the women's duty to attend to the housework as well as light artisan tasks.

Wealth exists in the form of jewels and coconut palms (Stout 1947 a: 25). Since no food-stuffs are imported and the production equipment can either be manufactured at home or belongs to the community, and the coconuts are used purely for export purposes, this wealth has no further effect on the economy.

In spite of this, wealth has caused the formation of 2 social strata (Stout 1947 a: 33). There is a certain fluctuation between the strata. The chances of education, acquiring wealth, achieving intellectual and political positions are the same for everyone (Stout 1947 a: 48). "Overriding all feelings of stratification . . . are the principles of community cooperation and political democracy . . . all persons are expected to contribute their share of materials and labour and in actuality they nearly all do on every occasion" (Stout 1947 a: 34).

The political organisation is democratic. Officials are elected for life (i.e. if they are not deposed or resign before then) to deal with all public affairs, foreign and domestic policy, road and housing construction etc. They have limited freedom for making decisions and remain accountable to the plenary assembly of the men (or in some cases of the women). If the assembly repeatedly reaches no agreement in important matters a division of the community may result in which case one section moves to a particular part of the village or onto other islands where it forms its own community or integrates into another community with whose members it is more in agreement. Thus, in the course of time 3 political parties have been formed (cf. Wassén 1949: 91; Marshall 1950: 190 seq.).

All communities (at least those of San Blas) unite in a general assembly to which each community sends its delegates who elect the *saila tummat* ("great chief"), discuss all the tribe's problems and establish connections with the government of Panama. The parties play a decisive role in the election of the *saila tummat*. The influence he can exert is only institutionalised to a very small degree. It is possible that the communities of an opposition party may de facto not accept him.

The prerequisite for the election of a *saila* (in the communities or in the general assembly) is simply that the candidate has expert knowledge, i.e. that he knows the history of the Cuna (the *Tatkan ikala*), especially the history of the *sailas* (i.e. the political history) and that his knowledge of the "white civilisation" and its history be as comprehensive as possible (cf. Wassén 1938: 34 seq.). The *saila* is not exempt from his usual work (cultivating the fields etc.), he may not shirk his communal work within the community and must follow the directions given him by the respective expert official (e.g. on road construction) in these matters (cf. Marshall 1950: 192, 194; Nordenskiöld 1938: 43 seq., 80 seq.; Stout 1947 a: 28 seq.; Wassén 1949: 88 seq.; Holmer 1951: 184 seq.; *Carta Organica* (1953)).

The interethnical relations of the Cuna are varied. The Cuna have always had to come to terms with their exterior enemies; with strange tribes,

colonial powers, pirates, the republics and, more recently, with the USA (Wassén 1961 a). But there are groups with whom they sympathize; for instance in the 17th century with the pirates whose allies they became against the Spaniards (Stout 1947 a: 51) or in the 19th century with the Independence Movement, and in the same way today with the Congreso Indigenista Interamericano (Wassén 1949: 94).

Society in Literature

The literary horizon of an ethnic group goes only as far as the horizon of its knowledge; anything beyond this belongs to the outside world, is a creation of the imagination which reproduces the familiar social conditions at another level. Certain relations between the society in which a literature exists and the image which is given by the literature are definitely present. How, then, does Cuna society appear in Cuna literature?

The subject of a story is a collective, not an individual. A collective is a hero rather than an individual (except in mythical times). This corresponds to the Cuna's true practice: the work is done by a cooperating collective, not by an individual. Both in reality and in literature there is one person in each collective who deals with the task of coordination, this task is, however, only one of many which he fulfills—he is not a hero. This is the difference between the Cuna poetry and all heroic poetry in the broadest sense of the word: literature about war-heroes, spiritualized heroes, negative heroes etc. In order to find a case in which similar emphasis is laid upon the collective one would probably have to search as far as the Russian revolutionary literature (e.g. A. Block's "The Twelve"). It is true that there are collectives in the literature of the tribal peoples, and also in certain phases of heroic poetry. Firstly, however, they do not stand in the foreground as subjects of the action and, secondly, the group's special social bonds (particularly kinship) are greatly emphasized and even form the basis of the action. Precisely this is not the case as far as the Cuna are concerned. No particular social bonds bring the collective together, no kinship ties, instead it is the common task, justified both by the fact that the members of a collective are destined for a common task right from the beginning of time, and by the fictitious kinship in which all the Cuna are "brothers", although this still does not explain the solidarity of the collective since it comprises n "brothers" out of 30,000. The reason for the subjects in literature being collectives lies rather in the social conditions

of work. These are reflected in the literature; in this respect there is a close connection between the behaviour and the practices described in the literature and this is the case not only when society is described directly in the literature but also when it is described indirectly, as in the epic poetry. Woman, too, who as houseowner (due to the uxorilocal marriage rules) has a balanced position in relation to man is presented in a manner according to her social significance in literature (Alba 1947: 19).

The fact that at the beginning of the *Tatkan ikala*, i.e. at the beginning of Cuna history, individuals, too, appear as subjects and furthermore, collectives, when they occur, are held together by kinship ties can be explained by the fact that this literature is related to a more ancient form of Cuna society and most probably originated at the same time as the first attempts were being made at slave-keeping (2.1.0.5, p. 237). By extending a principle of construction, Cuna poets of later times have thus been able to reduce the antinomy between the contents of the old and the literary forms of the new social order by not isolating the individuals of early epochs but by placing them in the context of a series of similar personnages so that a group of heroes acts separately in space and time, yet still constitute a group formally.

Just as the Cuna are not isolated in reality, neither are they isolated in literature: the enemy attacks society's inner harmony. It penetrates from outside and disturbs the peace. In the historical poetry the enemy is mentioned by name: as, a Spaniard, a missionary, a soldier, a seducer and an oppressor; in the epics they were alluring women, horrible animals and spirits. The enemy tears someone away from his society by means of seduction or violence, kidnaps and enslaves him. A collective sets out to rescue him. Sometimes they can negotiate with the enemy (1.1.5), usually the enemy has to be liquidated (1.1.7). On the other hand it is sometimes possible to do business with the enemy, e.g. learn about plants for cultivation; in this way the neles in literature travel into the outside world sometimes gaining useful knowledge which they bring into the inside world (2.1.2.3). Relations between outside and inside and between Cuna and non-Cuna correspond exactly to those between the outside and inside worlds and between friends and enemies in literature—which are described in historical poetry directly as non-Cuna/Cuna relations, and in epics as relations between spirits and animals on the one hand, and people ("Tule", i.e. Cuna) on the other. "The differences are alike, not the similarities" (Lévi-Strauss 1965: 101). The basis for these differences is, however, in this case, not mental structures but social conditions.

Structure of Literature and Structure of Society

It can hardly be denied that connections do exist between the concept of society conveyed by literature and the society within which the literature exists. The *p*-theory then organizes the concept of society into structures. A relation between these structures and the society in which they are produced is often objected to in favour of the "immanence" of the works (cf. Fügen 1964: 97). Certainly, if one were to claim that the structure of literature must "reflect" the social order mechanically it would be a mystification which could hardly be verified empirically. The emphasis placed on "pure immanence", however, is ideological, it annuls either the relations between signs and reality, ignoring the horizons of the mind, or the relations between the expression and the message, the form and the concept, denying the semiological character of literature—for this, and nothing else, is the so-called dichotomy of "form" and "content".

The actors form a collective; each collective comprises a series of individuals who do not lose their individuality within the collective. All collectives and all the individuals within the collective are on a level with each other. This basic structure manifests itself not just in the content but also in the form, namely, because the members of the collective whose acts are described in literature are all referred to by name and all treated alike e.g.:

The boy Inatoippipiler climbs into the boat,
 The boy Oloyakinyalele climbs into the boat,
 The boy Naluokinyapippiler climbs into the boat, etc.
 (1.4.1: 315—317).

The collectives, too, are treated in the same way exactly, in relation to other collectives. In this manner, i.e. by repeating the sentence structure whilst changing the subject, the largest part of the verse series is produced. Thus the almost total lack of antithetical, synonymous and sequential parallelisms, usually so frequent in parallelistic literatures, and the preponderance of enumerating parallelisms is explained. When the individuals within a collective are allocated various attributes, they are given them singly and separately. The logical structure of this form of presentation is that of covering sets. The parallel nature of the acts of an acteme and the scenes of a sceneme arises because in each case they are descriptions of the same collectives. If there were a single hero in literature, almost the entire *p*-theory of the Cuna would be inapplicable. The *p*-theory only makes sense if the subject of the action is a collective.

The contents intermediate necessarily between the literary and the social structures. Thus enumerating parallelism, for example, if filled with a

different content, can even reflect an entirely different social order. For instance in the North American Puebloliterature:

"Hö channi of the spruce of the north;
Hö channi of the pine of the west;
Hö channi of the oak of the south;
Hö channi of the aspin of the east;" etc.
(Walton and Waterman 1925: 43)

This is religious poetry. The gods, the powers or the directions of the wind are all enumerated, all are of equal importance; otherwise the success of the magic would be endangered.

The fact that not all the groups of individuals in the verse series are groups of working people, but also groups of stones, plants etc., is insignificant. It is a straightforward consequence of their anthropomorphisation that they are included in the system. However, up till now, we have only shown the relation between the syntactic and the semantic micro- and macrostructures and the structure of the collective. This is only a part of the structure of literature. However, as we have shown, it is precisely that part from which the corresponding principle of construction of variation has spread out: the phonological structure was not involved until later. An abstract description of the process might look like this: at an earlier stage of development in culture and society of the Cuna other structures existed, different from those of today. Due to the change in conditions the spreading of the latent principle of construction of variation was possible. In the beginning this occurred on the basis of concrete relations by which the new principle, applied in the sector of syntactic and semantic micro- and macrostructures, gave adequate expression to the new contents and an adequate presentation of the new concept of society. As a mental process this develops its own dynamic force and carries the principle of construction right into sectors in which it is not necessary because of their concrete relations, e.g. the phonological components of the *p*-theory. Ultimately, due to concrete relations with other cultural sectors it reaches out further, covering other cultural sectors; this is often aided by the fact that in the new sectors it constitutes an indirect expression of the social order.

Function of the Literature

One Cuna Indian writes: "Our music (songs, i.e. poetic texts) is always applied to the different material and spiritual needs of man" (GEM 1947.19.52, No. 10). By this the manifest functions of the respective

textemes are meant. Beyond this it is possible to formulate hypotheses on the latent functions of the literature.—The literature influences society in two ways; firstly, in the historical-political poetry by directly calling for certain behaviour patterns, in other words setting norms, and secondly, in the epics by presenting symbolic acts with which the individual identifies himself, i.e. participates mentally, thereby creating a new system in his subconsciousness (or also consciousness). In the latter case too, although symbolic, relations to an independent reality (*seinsautonome Wirklichkeit*) are founded, the mental conflict is transposed into reality—into the outside/inside model. In both cases the function of literature may be considered to be that of enlightenment; in the first place enlightenment on a “real” situation, and in the second on a mental one. However, this form of enlightenment aims at revealing a condition as being bad, or intolerable and then disclosing that it must be changed and harmony restored. It has been tried to achieve change in the epics by demonstrating it symbolically, thus forcing the individual to participate mentally (at which point a change would already have been achieved). In historical poetry change is arrived at by naming the path leading to it and encouraging the individual to take that path; in this case the realisation depends on the individual’s conscious action. Thus far the difference between the epics and psychotherapy is quite insignificant; historical-political poetry is virtually identical to political and moral speeches. The question now is: why all this in the form of literature? Why, then, in poetic rather than everyday language?

The reason may of course lie in a historical process. So far it is unavailable to us because of the situation regarding sources. But even so there is one question which arises, one which is certainly more interesting: What advantage can there be in formulating political speeches or psychotherapy in poetic language? This, for the Cuna, is merely the question as to the function of the *p*-theory being a definite one, this way and no different.

The answer emerges readily from the isomorphisms established above: the structure of a literary text is almost isomorphic to internalized forms of behaviour (patterns of culture) and reflects the harmony aspired to by the mental and social order. The enlightenment, in so far as it is a matter of content, as a presentation of a better order is endorsed by the presentation of the same order at the level of forms, in so far as it is a structure. The link between the literature and the change in mental and social reality is a reorientation of conscious or unconscious mental structures. This, in particular, must heighten the effectiveness of ideologies to a very great extent.

Society and Singer

The singer as such has no clearly defined position in the social order. In the language there is not even a single expression to cover all types of singers. Instead there are only names for singers of certain texts or text groups, like "kapur-ikal-tuleti", "sia-ikal-tuleti", "apsoket-ikal-tuleti" (kapur-ikal-singer etc.). Besides this there are expressions with a more extensive meaning, for instance "kana" for the singers of therapeutic epics; "inatuleti", medicine man, for the singer of uanets for medicines; "kantule" for the singer of initiation epics who is simultaneously the master of ceremonies at the initiation celebrations; and "saila" for the singer of historical-political texts, who is also the political leader. (In addition there are, of course, the singers of texts requiring no specialisation, like cradle-songs. These do not form a special social group.)

All groups of singers have one thing in common; although they do ordinary work (agriculture, fishing etc.) like every other Cuna, they are specialists, having a command of one sector, but by no means of the entire literature. The sailas, inatuletis and kantules have other functions besides that of a singer. All singers except the sailas are paid for their work.

It appears quite understandable that the only work in Cuna society which is paid is the singer's (or healer's) sparetime occupation: it is the only form of work which not everyone can do for himself and which is not performed by collectives, which means that the normal method of direct "exchange" of labour force is inapplicable. There is, however, one problem which arises at this point for which there is really no satisfactory solution: why is singing not a communal activity as in many tribal societies? Why is there absolutely no communal singing? The high degree of specialisation demanded by the *p*-theory can only partly answer this question.

Every singer must have an education lasting between 3 and 12 years (cf. Keeler 1954 a: 156). This takes place under the supervision of at least one and usually several qualified singers and must be paid for with money, value in kind or labour force (cf. Gasso 1912: 251). This education is available to anyone with sufficient talent. There is at least one inatuleti in every household (Keeler 1954 a: 9; Kramer 1967: 575), so that the inatuletis constitute at least 5% of the entire population. Nothing is known about the number of singers of the other kinds, but there are probably fewer. Since the education of an inatuleti can be regarded as a kind of basic education which most singers must complete, little more than 10% of the population can be qualified singers. The education as a singer automatically makes it necessary to acquire a knowledge of writing (Keeler

1954 a: 9). Although every qualified singer can undertake to teach others, there are traditional centres to which the students travel far to procure a particularly good education. They often stay in such "schools" for several years before returning to their own villages. Famous centres of this type are for instance Arquia (Herrmann 1964: 277), Nerkanti Tolla, Sokopti, Walla (Keeler 1955 a: 211), all of which are situated in the interior of the country.

One can see the value placed on Cuna literature when one considers that often no less than fifty to a hundred dollars is paid for the knowledge of a literary text, plus ten or twenty more for the accompanying interpretation (de Smidt 1948: 73, Keeler 1960: 11), and for simply reciting a text, three to five dollars (Keeler 1960: 11). Education is the only way in which a Cuna can achieve special status (Marshall 1950: 348), the singers are the only individuals to enjoy a special prestige. Often they dispute among themselves as to who knows the most. Education in itself gives an argument authority, quite apart from its contents (Wassén 1938: 53; Marshall 1950: 194). Christian traditions (Tinnin 1940: 88), Euro-American knowledge are absorbed eagerly but they are not valued as highly as the Cuna's own traditions (Marshall 1950: 348).

Considering the singer's high ranking in society, it is to be expected that he grant himself a privileged position in literature. In the epics he appears as commander-in-chief of the nelekan ("soldiers"); he appears rarely himself, but when he does it is with an air of superior calm:

The singer at the edge of the silver storey on a golden chair, on a little chair he sits and regards the place.

The Northwind rises mightily; the singer regards the place . . .

The waves of the sea rise with foam; the singer regards the place: it is he, the singer . . .

The waves of the sea have gradually become calm; the singer regards the place: it is he, the singer. (1.1.7 a: 1, 2, 5, 8).

There is a motionless quality about him; he sits and sings, that is all. In texts about life after death he makes use of his privileged position: he prophesies bitter punishment for anyone who seduced his wife in this world. (1.3.2 a, p. 478; 1.2.1, p. 145.)

One may add an assessment of his objective importance for the society to the singer's own appraisal of himself and that of society. The social order of the Cuna can only be maintained if every individual both keeps the rules to the letter—in particular that of the high principle of brotherhood, and exercises self-discipline at all times. As in the Cuna democracy there is no

executive power apart from the family, no judges or police, literature, and thus the singers and educated people, play a significant part in maintaining and developing the social order (cf. Marshall 1950: 189; Reverte 1961: 72). In this respect self-interpretation and objective assessment coincide. This applies to the political singers to the same extent as to the others, they all create the principle of equality in the same manner, although in different media.

Social History and History of Literature

The Cuna is one of the few tribal peoples whose history can be traced (although only in outlines) back about 500 years, thanks to historical sources. True, however, the only well-documented features are those which were most obvious to the white people when they made their occasional visits: "material culture", the high percentage of albinos, attitude towards strangers, customs and traditions and the like. The historical writings stemming from external sources (collected in Marshall 1950: 294-8) are complemented by the Cuna themselves. Unfortunately only modern versions are available for this purpose, although the Cuna have had a written literature for several centuries of which the village chronicles and the like are a part (cf. Reverte 1961: 110). Apart from this, literary documents in the narrowest sense would of course be especially informative for a history of literature. However, due to the unfavourable climatic conditions in Darién, the Codices rarely keep longer than 30 years so that the older sources are probably lost for ever (Kramer 1967 a: 575).

Twice in the cultural and social history of the Cuna there has been a decisive change, so that we may take three different periods into consideration. No-one can tell how many other developments occurred before these three periods. Little is known about the oldest of the 3 periods. It ended in the first of the 2 historically recorded migrations of the Cuna; it was the immigration into Darién towards the end of the 16th and beginning of the 17th century. Thus the Cuna moved further than before under the influence of those cultures of Columbia and Panama which were on the threshold of "high civilisation", having come into close, though hostile contact with the Cueva, severely decimated by the Conquista, a society of slave keepers, and probably partially assimilated the Cueva (cf. Salcedo 1908; Wassén 1962). It would, however, be totally incorrect to try to explain the cultural achievements of the Cuna, for example writing, on the basis of these con-

tacts as it is a known fact that the Cueva knew no form of writing (Romoli 1953: 141; Kramer 1967 a). Nevertheless it may be assumed that the Cuna, having up till then had one of the democratic or separatist social organisations usual in S. America (Lowie 1963: 340 seq.), developed at least the beginnings of class differentiation at this time. But this process is not based on diffusion, it is connected with the intensification of warfare. Due to the changes in the inter-ethnic system of W. Columbia and E. Panama brought about by the Conquista, the Cuna had to fight hard wars with strange tribes (Chocó, Catio, Cueva) almost continually (cf. Wassén 1938: 13 seq.; 1949: 21 seq.). As long as the tribe is only sporadically at war the prisoners can be assimilated into the tribe. If the number of prisoners increases at the same time as the number of wars a strata of slaves can easily evolve (Lowie 1963: 348). Although it may not have been very pronounced, the fact that in the 17th century this was the case is proved by the existence of a Cuna word for slave which has since disappeared from the lexicon of the Cuna language (2.1.0.5, p. 236 seq.). In the same way the importance of the soldiers and the leader (warchief) must increase with the importance of war which, in the case of the Cuna, is demonstrated by the fact that the privileged places in the Kingdom of the Dead were prophesied for those killed in action (2.1.0.1, p. 133).

In the Cuna literature of the 17th century certain social classes were given preferential treatment. At least the content of the literature of the second period certainly differed in this cardinal point from that of the third period. We know nothing directly about the forms, but the fact that the singers in the 17th century accompanied their recitation on percussion instruments (drums, maracas) (Salcedo 1908: 130, 134), makes it seem possible that it was rhythmic or metric literature. In accordance with the hierarchical social organisation the singer's role (or at least one kind of singer's) was different from that of today, he did not sing of the actions undertaken by collectives or by himself, but instead of the king's: for instance: in a report dating back to 1699: "all dinner time he (the King) was entertained with Musick, Vocal and Instrumental, which seemed to be very diverting to him . . . The subject of it was the great Achievements of himself and his Ancestors . . ." (Barbour 1907: 244, Warburton 1852 (III): 136; Cullen 1853: 172). It is particularly surprising that the political leader does not undertake to do the reciting himself as is one of the customary functions of the chief in many american tribes (Lowie 1963: 343; Wassén 1966: 168 seq.).

It may be stated with some certainty that the Cuna literature of the

second period shows fundamental characteristics of heroic poetry even if it may not simply be classed with this type of literature.

In the 17th century the only way for the Cuna to resist the Spanish aggression was to become militarised and form alliances with the pirates (cf. Long 1700; Cundall 1926: 106–132; Wassén 1940 a; Stout 1947 a: 51 seq.). However, in the eighteenth century the spanish expansion became retrograde instead due to the changes in Europe (cf. Davis 1866 seq.). Napoleon's conquest of Spain and the Latinamerican Independence Movement caused the pressure from outside to cease altogether temporarily (cf. Stout 1947: 53); Cuna militarisation had no function and could be abolished; there was no new supply of slaves and those on hand were obviously not numerous enough for slavery to have lasted. The privileged no longer had any reason for being privileged; the economy could be improved by trade and the innovation of cultivation of certain plants; in the course of time they even went beyond the stage of mere reproduction (cf. Stout 1947 a: 53 seq.).

Since the danger from outside was gone, the Cuna could come out of the mountain forests in which the extended families had been living in scattered settlements (Wafer 1934: 89) and populate the islands which were so unprotected against attacks (cf. Wassén 1938: 20 seq.; Stout 1947 a: 54). Thus, unavoidably, they moved nearer together in larger villages, which caused a change in the family organisation. The Eskimo-system became the Cuna-system (2.1.0.5, p. 236); the marriage rules were disengaged from a mechanical model; the significance of the kinship organisation lessened in favour of the village and tribal organisation.

In this situation of peace with the outside world and rapid social change, the culture could develop. It was probably at the beginning of the 3rd period that the Cuna developed their form of writing. The literature could thus create richer forms and gain in importance. Starting with the new social order the principles of construction described could extend into literature and other cultural sectors.

CHAPTER IV: ASPECTS OF THE EVOLUTION OF THE LITERATURE

Fictitious changes in the Cuna p -theory

Single components of the p -theory can be increased or reduced in quantity. One might for instance assume that the principle of formation of covering sets, so rare in the total of all p -theories, cannot, for logical reasons be further developed (at best it can be applied more often), it tends to be eliminated. Changes in quantity can, after all, turn into changes in quality. If, for instance, the number of the elements of the n -tupel is limited generally to two, another p -theory evolves on principle. Verses then consist of only two subverses, and verse series of only two (parallel) verses. This must automatically cause a radical restriction of enumerating and temporal parallelisms, since these become meaningless in the limited form. Synonymous and antithetic parallel verses take their places. At the same time the principle of construction of the macrostructure must be abandoned, because it is only with difficulty that one can put a meaning into a text in which there are two representations of each acteme and each sceneme. The now dualistic principle of construction must gradually apply to the phonological subsystem thus also limiting the number of verse sections per subverse or verse to two, or, more probably, eliminating the principle of pitch differentiation entirely and creating a rhythmic or metric structure with a simple caesura. In the tropes this will generate (semantic) binary oppositions like those described by Lévi-Strauss—a p -theory which originated in this manner does indeed exist: e.g. in the finnish-carelic folk poetry (Steinitz 1934). In the Old World it is in fact so common that Jakobsen (1965) considers it to be the p -theory of parallelism as such.

If the variation series are sequentialised and the formation of covering sets is abandoned simultaneously with regard to parallelism, the p -theory of the Pueblo, Navaho and numerous other N. American ethnic groups evolves (cf. Walton and Waterman 1925). If such a p -theory evolves in a culture whose conception of the universe is based distinctly on the directions

of the wind, as among the Pueblo, then the *p*-theory will come under the influence of this extraordinarily expansive principle of construction, so that the number of the elements of the variation series is determined as being four (4 wind directions), five (4 wind directions and the centre), six (4 wind directions, top and bottom), or eight (8 wind directions), as is indeed true among the Pueblo. At least this applies to the syntactic and semantic micro- and macrostructures. Under these circumstances the tropes will become dependent on the symbolism of the wind directions.

Finally, parallelism can be "broken up" altogether: three main types of development are then conceivable. If there is no form of writing, either the *p*-theory can be superseded by one based on the formula/theme principle, or short, highly condensed structures must be generated, as for instance in the Australian literature (cf. Kramer 1967 b) provided one dispenses with (verse) poetry altogether and contents oneself with prose (however this is probably not the case anywhere). If a literature can be established in writing, a range of possibilities reveals itself, which can, however, still be restricted due to the fact that certain features will be preserved. In addition to this the development depends on the particular type of writing.

Cuna Literature and Concrete Art

Parallels to Cuna literature are to be found in modern euro-american art. In order to demonstrate this one must make certain qualifications. To begin with, as far as western literature is concerned, it is impossible to base ones considerations on a *p*-theory as a system, since in this case closed systems are, at best, forced artificially; instead, we must consider the relations between the texts. Then the levels of literature, phonologic, micro-structural and macrostructural, must be isolated and compared singly.

Affinities to the microstructure of the Cuna literature are to be found in Cubism; they are systemized in the *poésie concrète* which was developed in Latin America (especially in Brasil) and in Europe after the second World War. As, for instance in Heißenbüttel (1966 (Kursbuch 5): 36 seq.):

"Was tut man mit Überlegungen: man stellt sie an

Was tut man mit Feststellungen: man trifft sie

Was tut man mit Entschlüssen: man faßt sie

(etc. etc.)

also: Überlegungen anstellen

also: Feststellungen treffen

also: Entschlüsse fassen

(etc. etc.)

also: Überlegungen in den Wind schlagen

also: Feststellungen in den Wind schlagen

also: Entschlüsse vermeiden

(etc. etc.)

was tut man mit Überlegungen: man schlägt sie in den Wind

was tut man mit Feststellungen: man treibt Schindlunder mit ihnen

was tut man mit Entschlüssen: man verschiebt sie auf morgen"

(etc. etc.)

This text (and many others belonging to this literary school has precisely the same structure as a composition of verse series of the Cuna. Whilst modern european sculpture (especially during Expressionism) has been proved to have been influenced by that of the primitives, in the case of literature no process of diffusion can be established.

The macrostructure of Cuna literature corresponds to that of the Nouveau Roman (Robbe-Grillet, Sarault, Butor etc.). The difference which one immediately notices is more a matter of content: the continuity of action, preserved in full by the Cunas, is broken in the Nouveau Roman. Microstructural similarities do not exist.

The rules about the sequence of the pitches of Cuna verse can be found in a more complex form in the serial form of composition of dodecaphonic music (Schönberg, Webern etc.). The difference produced by the different degrees of complexity is that the Cuna use only 3 notes, whilst the serial composers use 12 and, in addition, allow more variations. The common rules are roughly the following: the various notes (which are different from one another) figure in an unchangeable sequence which is constantly repeated, though varying; one note may be repeated at will (straight) after itself; a note can be shifted (in the case of the Cuna by one full note, and in serial music by an octave).

All these are, as among the Cuna, automations of composition. An artificial, emphatically secondary principle of construction is used in a matter in which it should not be concerned: all the *p*-theories discussed have the common characteristic that they can be presented in a mechanical model; this separates them from those for whose presentation a statistical model is necessary. Also they cannot be recorded by purely linguistic methods because they arrange the linguistic elements in structures which are virtually independent of the grammar. They prerequisite the grammar, but do not

contain it. The most adequate way of presenting the mechanical *p*-theories is by means of ordered sets or operations as could be demonstrated by the case of the Cuna *p*-theory. This results in the abstract possibility of developing all the mechanical *p*-theories logically possible from one basic structure (maybe also from several). Thus single *p*-theories will become attainable through more than one chain of operations. All different chains must be admitted. Then one could advance the hypothesis that Type A can only change into Type B if A and B are next to each other in any chain. This appears to be a practicable way, and the programme worked out as early as 1928 by Tynjanow and Jakobson, "Formation of a finite series of empirically-given structure types, respectively, structural development types" (Tynjanow and Jakobson 1966: 76) and which has already been partially carried out for linguistics, could at least be realised for the mechanical *p*-theories.

Admittedly, little would be gained by this. For in the abstraction from the substances to the structures the very differences are lost which first and foremost constitute history. The epistemological error of structural anthropology lies after all in the fact that it "transfers the centralistic and total character of some primitive societies to western civilisation through the selected coordinates system. Even if one cherishes few illusions about its gravitation towards total forms, and the decline of the individual, it is still the differences between a pre-individual and a post-individual society which are decisive. In the democratically administrated countries of industrial society totality is a category of intermediation, not of direct power and subjugation" (Adorno 1964). The closedness of the theory of serial composition is reflected in the context of social totality. The closedness of the Cuna *p*-theory remains—in spite of all change—subjugated unreflectedly to the power of tradition. In this respect it excludes freedom. The structuralist, because of having to consciously confine his considerations to the "differences", is not in a position to see *this* difference. Herein lie the limitations of structuralism.

Evolution and Energetic Value of the Works

In 1924 Tynjanow pointed out the relevance of energetic value for the evolution of literature (Tynjanow 1967: 9), but the science of literature has hitherto virtually scorned paying attention to such superficialities as the length of a work. However, if one considers the transition from oral literature to that set down in writing the mere external size is of crucial importance.

To begin with the field of investigation must be narrowed down to verse literature—as opposed to prose. The criterium for distinguishing is particularly simple for the ethnology of literature: one can define versification as sung, and prose as spoken literature. At the same time it becomes clear that for versification the size has a special significance; for a set of sentences spoken one after the other is limited only by physiological factors, but the singing of a text presents difficulties in that the musical system does not necessarily coincide with the linguistic system, although neither one can operate independently of the other; instead, the relations between primary and secondary structures must be calculated more or less accurately. The setting-down in writing, since it need not take place in a short space of time and can be corrected, makes intensive work on the verse possible.

It would, however, be naive to assume that a direct correlate exists between the application of writing and the size of a verse text. Experience shows that this is definitely not the case: thus, for instance, the homeric epics which are after all set down in writing consist of 12,000 verses (Odyssey), respectively 15,000 (Iliad), Beowulf of 3,128, Cid of 3,730, Roland 4,002, Gilgamesh 3,500, Cuna epics of about 2,000 subverses on average, whilst an epic of the Kara-Kirghiz, composed entirely orally can comprise no less than 40,000 verses, as is the case of the Manas version of Sagymbai Orozbekov (cf. Bowra 1952: 330). This can be explained by the fact that the oral singers employ the formula/theme technique, which Bowra (1952: 179 seq.) calls the “mechanics of narrative” and which, in the decisive aspect in this instance, is based on the repeated application in changing combinations of sentences adapted to the metre.

Thus Tynjanow's term “energetic value” can be determined sufficiently for the matters at issue; a relation between the amount of work necessary for composing a piece of verse poetry, its maximal possible size, i.e. its energetic value, and the application of writing. Verse poetry which is based on the formula/theme principle can be long without being set down in writing; verse poetry which manages without (or almost without) this technique must be short, or set down in writing. (Under certain conditions parallelism can play a similar role to the formula/theme technique.)

If one examines the stage of development of literature at the time when writing was introduced, one can proceed on the assumption that a *p*-theory existed before the innovation and that this *p*-theory, if it is applied to long texts, is based on the formula/theme principle (as among the Kara-Kirghiz) or on parallelism (as among the Navaho) and if applied to short texts can have developed subtle possibilities (as among the Australians). Bowra (1952)

and Lord (1965) have studied the changes of formula/theme literatures upon the introduction of writing and found that at the beginning the technique is greatly limited quantitatively and the poet devotes more attention to the details of composition (Bowra 1952: 252 seq.). This is one-sided in as much as it presupposes that a system of writing already exists, before it is applied to the literature, and that it is a matter of phonemic writing. However, a series of writing systems exist which were devised for the sole purpose of writing down literature and which presuppose a *p*-theory. These may be termed literature writing. Cuna writing, which belongs to this category, has already been described. An analysis of other writings of this type can give information on the evolution of literature, in as much as it is determined by technical elements.

Literature Writings

The writing of the Iban (Kalimantan) were discovered only a few years ago by Harrisson and his colleagues and published for the first time in 1965 (Harrisson 1965; Harrisson and Sandin 1966) although the Iban have for a long time belonged among the better-known ethnic groups. The Iban writing is written on long, narrow, wooden tablets on only one line, from left to right. The original writing signs are highly stylised and unrecognizable as "pictures"; only recently has the Iban writing developed into picture-writing, constituting a definite parallel to Cuna writing which has only taken on a picture-writing character in recent times. The Iban writing is employed solely for setting down a few ceremonial songs. These consist essentially of three parts: in the first the arrival of the shamans at the place of festivity and the manner in which they make their preparations is described; in the second a journey to the outside world, during which certain "gods" or "spirits" are invited to the celebrations; and in the third, how the gods or spirits arrive at the place of the celebrations. The first and third part are almost identical in all textemes, in each case it is above all the middle one which is different. This consists less of a description of a journey than of that of a series of places along the journey. Each place-description is introduced by the formula: "Leave the place/and come to . . .". Then, striking features of the place are named, like special stones, plants or animals, its inhabitants and the characteristics and occurrences associated with them. The whole process presents a kind of mythical topography of the outside world. Which places are mentioned in a texteme

depends on which gods or spirits are to be invited to the particular celebrations. The features of a place to be described also depend on the celebrations (Harrisson and Sandin 1966, footnotes). The contents of a *texteme* are thus determined by its *contexteme*. Generally, a text has no more than 200–300 verses arranged together in stanzas (named “verses” by Harrisson and Sandin 1966). Of these stanzas, each one in the middle part describes exactly one place, in the first part each describes one action, and the third part comprises a single stanza. The number of verses per stanza varies according to the singer’s wishes approximately between three and twelve, and is probably about six on average. In all *textemes* partly the same and partly different places are described. If a place is described in several *textemes* from the same aspects, the stanzas will either be virtually identical or have the same content; if it is described from different aspects, some verses are nearly identical, others are different. Thus, for instance, the “place with the 2 Kendi Aji” signs are thus described in the Gawai Sakit as follows:

“Lengka ka ari nya,
 Manggai dikendi aji dua berimbau.
 Nya dikemata ka seranda,
 Ngemata ka seraka pampang jalai.
 Nya orang ke mangkang jalai besai,
 Ke betumbok tujuh puloh
 (Harrisson and Sandin 1966: SF/25 (b))
 Leave that place,
 And come to the two kendi aji signs.
 These are looked after by the unborn bastards,
 Who guard the path junction.
 Their dwelling is close to the big path,
 The meeting place of seventy tracks.

The description of the same place in Gawai Tajau has this text:

Lengka ka ari nya,
Manggai di kendi aji dua berimbau.
Nya dipangkang saranda,
Ngemata ka seraka pampang jalai.
Ke betumbok tujuh puloh
Nya orang mangkang jalai besai mua pemaioh.
 (Harrisson and Sandin 1966: J/31 (b))

(In SF/25 (b) and J/31 (b) identical phrases are italicized. In J/31 (b) the last and second to last verses have been changed for SF/25 (b)). By comparing verses with identical contents one notices that the identity of the verses is based on the formula principle rather than on the fact that they are learnt by heart:

Lengka ka ari nya (SF/26 (b). 1)

Kejang ka ari nya (J/32 (b). 1)

This corresponds exactly to the substitution principle for formulas discovered by Lord (1965: 47 seq.). The variation, however, goes even further and disengages itself from the formula:

...

Has already been grasped by me,
Clutched firmly with my finger ends.
These I carry along the long-house,
In case anyone is evil-hearted,
Towards the shaman.
(SF/8 (c))

...

And grips it with his two finger-tips,
Carrying it along as he goes,
Along the beautiful house verandah,
Afraid of passing the people,
The parents of his divorced wife.
(J/8 (c))

In this case equivalent formulas and metaphors have been exchanged. This corresponds to the theme-principle (cf. Lord 1965: 68 seq.).

The ceremonial songs of the Iban are constructed on the formula/theme principle. The number of the themes is limited; each theme is built up on formulas which are to a certain extent interchangeable according to the requirements of the context; a formula has a firm structure within which single morphemes can be substituted. Formulas and themes are elaborated carefully regarding phonology and content. The difference between one texteme and other textemes is caused by the themes and their sequence, not their elaboration. This can probably even change in the texts of a texteme.

In the Iban writing a sign is written for each stanza. This names (at

least in the determining middle part) a place, or a striking feature of a place (in some texts (e.g. in the Gawai Umai, Harrisson and Sandin 1966: 198 seq.) the first part is not "set down" at all). Thus a set of themes and their sequence is fixed. The rest follows from the mechanics of formula and theme. Contrary to the Cuna writing, in the Iban writing it is not the knowledge of a *p*-theory as a corpus of rules which is a prerequisite, but as a corpus of themes and formulas (and probably a few rules).

Texts in the literature of the Na-khi (S.W. China; cf. Rock 1947; Rock and Janert 1965) are minutely elaborated in the details and show a complex construction in the macrostructure, for the analysis of which the texts of a series must be considered, i.e. the texts which are recited during one ritual. As far as the sequence is concerned, the macrostructures are recorded in special index-books; within a text they are clearly recognizable; elements of the macrostructure are not omitted when written down. Thus the microstructures remain. These cannot be formulated easily, in as much as they exist in more than one type, whereby each of the types appears only in an isolated position in the *p*-theories hitherto discussed. So one could state that the Na-khi *p*-theory is a combination of several simple *p*-theories. Nevertheless there is a uniform principle, viz. parallelism, although it occurs in different forms: thus the binary parallelism appears in this one case as the parallelism of verses:

²Dzhu ²t'u ²Mùan- ³llü- ¹ssu- ¹lo- ²k'o ²nnü ²t'u

²Dzhu ³bbue ²Mùan- ³llü- ¹ssu- ¹lo- ²k'o ²nnü ²t'u

(Rock 1955: 51, verse 7, 8)

Bitterness originated at Mùan-llü-ssu-lo-k'o

At Mùan-llü-ssu-lo-k'o it was that bitterness first came forth.

And again as the parallelism of half-verses:

²Dzhu ²t'u ²gkv ²muán ³shou, ²Dzhu ¹dzo ³shou ²muán ²nyi

(Rock 1955: 51, verse 3)

If one does not relate of the origin of bitterness then one cannot speak about it

with the grammatical transformation characteristic of Nakhi parallelism which, again, is parallelised in the following verse:

²Dzhu ³bbue ²gkv ²muán ³shou,

²Dzhu ¹dzo ²bä ²muán ²nyi

(Rock 1955: 51, verses 4, 5)

One must relate of the origin of bitterness,
 Or about bitterness one must not speak
 so that the characteristic half-pair-verse-pair (Halbpaarverspaar, cf. Steinitz 1934: 172 seq.) of binary parallelism evolves, although in the second part the half-verses are separated again; this is typical of Na-khi verse: two verses can be combined to form one and viceversa. However, this is by no means periphery for the setting down in writing, because, whilst singular verses, even when they belong to a verse-pair, are noted in full, parallel syllables in half-pair-verses are generally only noted in one half-verse is for instance:

¹Nv ¹nā ¹ha ²t'khi (¹ddo), ³k'v ²t'khi ²mā ²muān ¹ddo
 (Rock 1955: 70; verse 12)

He saw them sell silver and gold, but years he saw no-one sell
 whereby "¹ddo" in the first half-verse in the Na-khi manuscript is not written, but recited, whereas the same half-verses as singular verses are noted in full (as in verses 5 and 6 on the same page). The omissions become really extensive when long passages are parallelised (often whole stories) or when verses of half-pair-verses are parallelised more than once. The latter is particularly frequent—which is no longer surprising—in journey descriptions, e.g.:

...
¹Ggo ²Nga- ¹ba ²bā ²t'u, (¹Ggo ²Nga- ¹ba) ²nnü ¹dtü
¹müen ²Nga- ¹ba (²lā) ²t'u, (¹Müen ²Nga- ¹ba) ²nnü ¹dtü
³Llū- ¹gko ²gyi ²lā ²t'u, (³Llū- ¹gko- ²gyi) ²nnü ¹dtü
 ...
 (Rock 1955: 64, verses 8–10)

And arrived at upper Nga-ba, from upper Nga-ba he rose again
 And arrived at lower Nga-ba, from lower Nga-ba he rose again
 And arrived at Llū-gko-gyi, from Llū-gko-gyi he rose again

In this case the repetition of the place name in the second part of each half-pair-verse is omitted in writing. In verse 9 "²lā" is also omitted—these are frequent irregularities which cause no difficulties once the structure of the verse series has been recognized.

Whether we have thus established all omission principles of the Na-khi writing, is uncertain. (The omission of single syllables at least in the writing of names must be added, and this can certainly not be reconstructed by the *p*-theory.) It is, however, certain that the Na-khi writing belongs to the type of literature writings, and the gaps which one finds in a written

text as opposed to a recited one can most probably be reconstructed with a knowledge of the *p*-theory. That—and this is the crux of the matter—is after all the principle which enables the *dto-mbas* (“priests”) of the Na-khi to recite the texts, for they do not know them “by heart”.

Generally the Na-khi note less than a third of a text (Rock 1955: XI). Rock concluded from this that it was impossible to read a text without the aid of a *dto-mba*. It appears that this hypothesis must be revised. It is important that one disengage oneself from the philological idea that there is a binding text. No *dto-mba* wrote a text exactly the same way as another (Rock 1955: XI). The advantage a *dto-mba* has over a non-Na-khi who knows every writing sign is a knowledge of the rules of the *p*-theory.

The three writings which have been examined (Cuna, Iban, Na-khi) must at present suffice to establish the literature writing as a separate writing type. Mexico and the Easter Islands could furnish other examples. Literature writings are distinguished only by the specific relation between the written and the read texts. The semiological structure of the writing signs is of no importance here. This is demonstrated by the fact that the Cuna occasionally use latin letters in the same way as a literature writing, i.e. only noting the parts of the texts which are not redundant (e.g. in 1.1.1, 1.3.2 b, 3.2.2.8 b).

Development of Writing and Literature

In an early phase the literature writings are hardly more than a crude mnemotechnical aid which notes nothing more than the sequence of the textemes of a series. Among other things the tablets which are still used today at the Cuna initiation celebrations belong in this phase (e.g. Wassén 1949: 51 seq.), and the recitation sticks of the polynesian singers (Barthel 1958: 324 seq.) both of which are probably pre- or early forms of the actual literature writings of the Cuna, respectively Easter Islanders. The writing of the Iban is more efficient, establishing the sequence of the themes; the writings of the Na-khi and the Cuna are unlimitedly versatile, if necessary they can be employed to note every syllable, or every morpheme of a text (e.g. 3.2.3.1 seq.), and to write texts in foreign languages (Norden-skiöld 1938: 422), only omitting syllables, respectively morphemes, when they are poetically redundant.

Accordingly, a writing of the Iban type can only be introduced if a literature is based on the formula/theme principle; it can only change the literature in as much as it sequentialises the themes, thus contributing to

a general stabilization of the formulas and themes. It only has a meaning if sequentialisation is necessary on social or religious grounds and only takes place under such circumstances; it would be senseless in heroic poetry.

A writing of the Cuna/Na-khi type can only be introduced if the literature is based on parallelism. It can change the literature in two ways: firstly, as among the Na-khi, it allows for better elaboration of the details, and, secondly, as among the Cuna, it permits the formation of energetically large (complex) structures (verse groups, covering sets, verse series combinations). In both cases it also makes the same thing possible as a writing of the Iban type, namely a general stabilization and the notation of lists of names of any length. It is therefore possible that their actual origin lies in social or religious motives and that the quantitative and qualitative changes in the *p*-theory are secondary phenomena.

The similarities between the writings of the Iban, Na-khi and the Cuna can in no way be explained by diffusion. A diffusion of writings, also of single writing-signs, is conceivable, but not the diffusion of such an abstract principle as the omission of poetically redundant text parts, which also operates in structurally different systems. Rather the development of a literature by the application of a literature writing can be explained typologically: different systems of the same order (*p*-theories) contain certain possibilities for development which only become realisable through a technical invention—writing. At the same time the writing systems in their turn are based on single features of the structures they are to express. The structures of those literary texts which are set down in writing cannot only be explained mentalistically, because technical prerequisites are necessary for their realization.

The literature writings are not simply a “pre-stage” of the “usual” writings. These, like the Quipus of the Incas or the ancient oriental writings, originate for the most part from the requirements of bureaucracy (also religious), result in the administration of man in totalitarian systems and are only later applied to the notation of literature and science (Lévi-Strauss 1960: 261 seq.). The literature writings on the other hand, are developed from the start for literature and science. It is possible that they were used for administrative purposes in a later phase, as was possibly the case in Mexico, but this is by no means a necessary development. The differentiation of classes is not a precondition of their formation. Certainly, they can evolve in stratified societies, as among the Iban, or in such societies with a privileged caste of priests, as among the Na-khi, but they can also originate in egalitarian societies, such as that of the Cuna.

Development of Ritual, Writing and Literature

The development of the literary macrostructure, of the ritual and the integration of literature into the ritual through the introduction of a literature writing can take place in different ways:

—The texts are related passage for passage to the ritual. Whatever happens in the ritual is mythically-metaphorically paraphrased in the text. The ritual itself is not set down in writing. This makes the elaboration of the ritual by that of literature possible. To a great extent the ritual determines the contents of the texts, and therefore in a small measure, also the macrostructure which can remain essentially unchanged. This is the case among the Na-khi, as far as the literature has not become entirely emancipated from the ritual, which should, however, be a secondary development.

—The texts are a component of the ritual; they do not paraphrase it, but substitute ritual action to which they were originally only the accompaniment. In this case the contents of the texts are determined by a diachronically earlier phase of the ritual. The influence on their sequence i.e. on the macrostructure is only secondary. On the other hand, here too, the literature writing contributes towards stabilising and dogmatising at least parts of the ritual (Jensen 1966: 10). This is the case among the Iban.

—Finally, the text can substitute the ritual completely. In this case the macrostructure is determined by the ritual, because, if the literature is to be a substitute for the ritual, it must have an equivalent structure. This is the case in the therapeutic epics of the Cuna, which have changed the macrostructures of the initiation and death epics by structural pressure. This process is found in other kinds of writing, for instance, in the Ancient Babylonian Atrahasis-epic. It is, however, unlikely that the process takes place without the introduction of writing, because the integration of action and language (cf. Chadwick 1940: 115) is on the whole more concrete and probably also easier to memorize. As, in addition, the rituals under consideration here are without exception rather complicated, the loss of concreteness which occurs with literalisation, if the texts remain the same length, can only be balanced by an increase in energetic value, which is only possible if a writing system is introduced. Besides, contrary to heroic poetry, in the ritual poetry (or poetry derived from rituals) the selection and sequence of the themes matter for magic reasons. In addition the selection and sequence are established not by purely compository rules but by extra-literary rules, determined by the conception of the universe. As for the rest, it may not be assumed that a writing system is drawn-up with a regard to literalisation of a ritual; where would such a requirement

stem from? Instead, literalisation is a possibility which evolves if a writing system exists.

Something quite different exists if a ritual is repeated in a myth, if a myth is acted out in a ritual, or, as Lévi-Strauss (1967: 255 seq.) says, if in rituals and myths the same (mental) structures are produced. These are relations between cultural sectors, not relations between a cultural sector and a material technique. The formation of epics which reproduce ritual structures but which fulfill other functions than the rituals upon which they are based, is equally different from the literalisation process mentioned. This is an intracultural diffusion process which can be explained by structural pressures. The derivations of heroic epics from shamanism (Chadwick 1940: 105; Bowra 1952: 25; Diels 1922: 239) repeatedly pointed out by classical philologists are related to such processes.

By means of gestures and songs the ritual presents a journey in the outside world. By structural pressures the story of the journey in the outside world can be transferred to the heroic epic. Then a (profane) epic formed on the basis of events (*Geschehensepos*) or an epic centred on characters (*Figurenepos*) with a tendency towards a topographically-oriented epic (*Raumepos*) (e.g. the *Odyssey*) evolves. But the story of the journey in the outside world can also be told directly, whereby the function of the ritual (e.g. healing of sickness) remains ensured. Then a *Raumepos* evolves. This process is only possible if writing is applied. The *Raumepos* can, moreover, be secularized, i.e. lose its original function. Then a *Raumepos* with a tendency towards a *Geschehensepos* or *Figurenepos* evolves. Where there is a written tradition the imaginative presentation of the outside world can be formed in a *Raumepos*, even at a later date, when the rituals no longer exists. This is the case of the *Divina Comedia*.

APPENDIX

Systematic Catalogue of Selected Works of Cuna Literature

Above all the catalogue should form a supplement to Chapter II by listing the contents of the classification structures presented in it, i.e. by enumerating in detail the members of the classes. At the same time it has the task of arranging in a clear fashion the material upon which the whole survey is based. It comprises all the published works of Cuna literature and the theoretically most important unpublished ones. The latter are for the most part codices in Cuna writing. A complete catalogue of the codices is of little theoretical interest and must be reserved for a future study.

Systematic catalogues have their limitations: either they become to a certain extent unsystematic, or they contain so many diacritic signs that they are positively incomprehensible. The catalogue presented here is only systematic in as much as it appears necessary in order to verify the classification structures mentioned in Chapter II. Apart from the decimal system compiled at that point, the following signs are used: The arabic numerals behind the last decimal point stand for certain textemes belonging to the group which is signified by the decimal figures. If only one text of this texteme is signified, then the last numeral stands for this text, too; if several texts of the texteme are presented they are marked by the small letters behind the texteme-numeral, whereby several publications of one text are combined. With the texts of the texteme 2.1 (Tatkan ikala), texts which are realizations of virtually the whole texteme are presented under 2.1.0; all others are only realizations of extracts of the texteme. (The texts of the texteme 2.1 must therefore be dealt with separately, since the texteme/text relationship is disturbed as generally only extracts are realised, and it can thus hardly be classified as "fragments".)

Capital letters behind the texteme-numeral mean that these texts are only classed in the respective group because of their content or their contexteme. Their classification according to the remaining criteria is given separately in brackets.

For the characterization of the manner of notation of a text, the following capital letters are used:

- K — Cuna writing (this also means that the text is written in Cuna language and is not a simple statement of contents.
- T — Text in poetic language. Not a simple statement of content.
- I — Statement of contents (Not in poetic language; these are in many cases interpretations of the Arkala).
- S — Cuna language.
- U — Translation in Spanish, English or Swedish.
- F — Fragment.
- M — Pitches noted as in musical score.
- B — Phonographic recordings (Tapes or wax cylinder).

For the remaining additional remarks, except for the signs for equivalence classes of macrostructures and contextemes introduced in 6., no abbreviations are employed. (Material introduced by GEM refers to codices in the ethnographic museum in Göteborg; the figures are the museum's inventory numbers.)

If the exact Cuna title of a work is known, it is written first, followed by its translation in “ ”; if the editor's title contains an exact translation it is given in (“ ”). If the exact Cuna title is unknown, the editor's title appears in “ ”, and if there is no editor's title an invented title which roughly reproduces the content is given in ().

- 1. Epics.
- 1.1 Therapeutic Epics (A I).
- 1.1.1 Apsoket ikala. “Song of Saying”; also called namakket ikala, “Song of Singing”. (A universal epic as treatment of epidemics; cf. de Smidt 1948: 9–12; Nordenskiöld 1938: 494–506; Marshall 1950: 216; Keeler 1954 a: 9, 26) TSF (partly literature writing)/GEM 47.19.49.
- 1.1.2 Kapur ikala. “Song of the pepper.” (cf. de Smidt 1948: 12–13). TUF/Keeler 1960: 250.
- 1.1.3 Sia ikala. “Song of the Cocoa-bean” (cf. de Smidt 1948: 9–12, 15).
 - a) TSUF/Nordenskiöld 1938: 577–592.
 - b) KISUF/Wassén 1949: 115–116.
 - c) TSF/GEM B. 11017 (2nd part).
 - d) (?) K (F?)/GEM 27.27. 1433 No. 5, 12–14.
 - e) K (F?)/GEM 38.45. 266 No. 3–2.

- 1.1.3 A Sia saila ikala. "Lesson on the Origin of the Cocoa-bean." (Macrostructure D, subcontexteme VI.)
K/GEM 27.27. 1443 No. 2.
- 1.1.3 B Sia Ulu. "Cocoa boat" (?). (Macrostructure D, contexteme unknown.)
K/GEM 38.45.266 No. 4.
- 1.1.3 C Saikan tikit. "Cocoa-bean Planting" (?). (Macrostructure D, contexteme unknown; cf. however, Pittier 1912: 652, 655.)
K/GEM 38.45.266 No. 11, 9.
- 1.1.3 D Saikan tikit e ulu (?). (Macrostructure D, contexteme unknown.)
K/GEM 38.45.266 No. 10, 10 a.
- 1.1.3 E Serkan ikala. "Song of the Old (i.e. the dead)." (Macrostructure A, contexteme I, probably a part of the Sia ikala, which must in that case be a kind of story within a story.)
KTSU (F?)/Holmer and Wassén 1963: 13-43, 48-52.
- 1.1.4 Akwalele ikala. "Song of the magic stone" (also called nusa ikala, "Song of the Rat" (?). Following the Akwalele ikala the Otammipoet, "Fever Cry", is sung; it has the Macrostructure D, function of contexteme VII).
a) K and TSUF/Nordenskiöld 1928 b: 53-75; Nordenskiöld 1938: 559-575, Tab. VII-IX.
b) K/GEM 31.27. 1 Nos. 1-3.
c) K/GEM 27.27.1438 Nos. 2-4.
d) K/GEM 27.27.1433 Nos. 11-8.
e) K/GEM 27.27.1433 Nos. 17, 16.
f) KF/GEM 38.45.271 No. 4.
g) KF/GEM 27.27.1445.
h) KF/GEM 38.45.271 No. 8.
- 1.1.5 Muu ikala. "Song of Muu." KTSU/Holmer and Wassén 1953: 22-79, 129-151; also partly in Holmer and Wassén 1947.
- 1.1.5 A Muu olopanter ki namakket "Song about Muu's flag". (Macrostructure D, following Muu ikala.)
TSU/GEM B. 16563.
- 1.1.5 B Muu purwa ikala. "Song about Muu's Wind." (Macrostructure D, contexteme unknown.)
KIU/Keeler 1960: 196 seq.; Fig. 63.
- 1.1.6 Kurkin ikala. "Song of the brain."
a) SUF/Nordenskiöld 1938: 593-611.
b) K (F?)/GEM 27.27.1432 Nos. 4-6.

- c) KF/GEM 27.27.1436 No. 6.
- d) K (F?)/GEM 38.45.266 Nos. 14–15.
- e) (?) K (F?)/GEM 38.45.267 Nos. 1–4.
- f) “Song for curing Nele when he has a headache.”
TSUF/Nordenskiöld 1938: 542–551.
- g) “Song with treatment of headache.”
TMUF/Densmore 1926: 18.
- 1.1.7 Nia ikala. “Song of the Demoness.”
 - a) “Canto mágico para curar la locura” KF and TSU/Holmer and Wassén 1958: 38–116, 118–119 (further fragments of the same codex (K) are in the Musée de l’homme, Paris).
 - b) TSUF/Holmer 1951: 134–137.
- 1.1.7 A Nia ikala e purpa. “Secret of Nia ikala”; also called ukkurwala e purpa, “Origin of the balsawood”. (Macrostructure D or B, subcontexteme VI.)
T(?)SU/Holmer and Wassén 1958: 18–25.
- 1.2 Initiation Epics (A II (D II)).
- 1.2.1 Tisla ikala. “Song of the scissors.”
TSUF/Holmer and Wassén 1963: 86–149.
- 1.2.1 A Tisla ikala e purpa. “Secret of Tisla ikala” (about the origin of the scissors). (Macrostructure D or B, subcontexteme VI.)
T(?)SU/Holmer and Wassén 1963: 82–85.
- 1.2.1 B Tisla saila ikala. “Lesson on the Origin of the scissors.” (Macrostructure D, subcontexteme VI.)
K/GEM 27.27.1443 No. 5.
- 1.2.2 A Saptur ikala. “Song of the Genipa Americana” (with Saptur ikala e purpa, “Secret of the Saptur ikala”). (Macrostructure A or D, contexteme II, respectively, subcontexteme VI.)
TSU/GEM B. 14406 (2nd part).
- 1.2.2 B Saptur namakket. “Song of the Genipa Americana.” (Macrostructure D, contexteme II.)
TSMUF/Garay 1930: 52–54.
- 1.2.3 A Inna ikala. “Song about the Chicha-festival.” (Description of the course of the festival.) (Macrostructure A or D, contexteme II or IX.)
K/GEM 27.27.1432 Nos. 23–20.
- 1.2.3 B Inna ikala. “Song about the Chicha-festival.” (Description of the course of the festival; wrongly named “wedding song” by

- the editor—cf. de Smidt 1948: 91.) (Macrostructure A or D, contexteme II.)
 TMU/Densmore 1926: 22–26.
- 1.2.4 A Kammu ikala. “Song of the kammu-flute.” (Macrostructure D (?), contexteme II.)
 TSUF and ISUF/Graetz 1958.
- 1.2.4 B (Hair-cutting Song.) (Macrostructure D, contexteme II.)
 TSUF/Garay 1930: 66.
- 1.2.4 C Nele Tipilele ikala nakkuite (?). “Song of Nele Tipilele”, “la cuesta de Tipi el adivino”. (Macrostructure A or D, contexteme II or IX.)
 TSU(F?)/Garay 1930: 62.
- 1.2.4 D Nok ikala. “Song of the drinking-cup.” (Macrostructure D, contexteme II or IX.)
 TSMU(F?)/Garay 1930: 56–58.
- 1.2.4 E Kalis ikala. “Song of Eating.” (Macrostructure D, contexteme II or IX.)
 TSMU(F?)/Garay 1930: 58–60.
- 1.2.4 F Innamette ki namakket. “Song of the Chicha-pot.” (Macrostructure D, contexteme II or IX.)
 TSU/GEM B. 15367.
 (Numerous other texts which are recited during the initiation celebrations can be found in Keeler (1956 b: 85–88; 1960: 258-263).)
- 1.3 Epics for the Dead (A III).
- 1.3.1 Masala ikala. “Song of the Bamboo Sticks.”
 a) TSBF and ISUF/Graetz 1958.
 b) K(F) and IU/Keeler 1960: 90–93.
 c) (?) “Song after a man dies.”
 TMUF/Densmore 1926: 18–20.
 d) (?)K/Nordenskiöld 1930 a: 45; Tab. I–III; 1928 a: Tab. II.
- 1.3.2 Nalup nakrus ikala. “Song of the Palm Cross.”
 a) TSUF and IUF/Nordenskiöld 1938: 446–478.
 b) “Los nombres de las montañas.”
 TSF (Literature writing)/GEM 31.27.6 No. 2.
 c) TSUF/GEM B. 16561.
- 1.3.3 Olopatte ikala. “Song of the golden Disc.”
 TSU/GEM B. 15 368.
- 1.3.4 A (Lamentation of Death.) TUF/Keeler 1960: 187.

- 1.4 Entertainment-Epics (A IV).
- 1.4.1 Inatoippiler ikala. "The Adventures of Inatoippiler." TSU/Holmer 1952 b: 10-83.
- 1.4.2 Machikunwatil ikala. "The Adventure of Machikunwatil." TSUF/Nordenskiöld 1938: 644-649.
- 1.4.3 "Song about Yolakilel, the Cayman, and Naeyadul, 'the stuttering'" TSUF/Wassén 1938: 161-165.
- 1.4.4 "Niga Sappin's Adventure with Machi-Nalili" IUF/Wassén 1938: 165-167 (cf. 1.4.5).
- 1.4.5 "Historia de Niga." (Macrostructure A or B, contexteme V (?).) IU(F?)/GEM B. 10590.
- 1.4.6 Tapkala ikala. "The Adventures of the Heron."
 - a) TSU(F?)/Holmer 1951: 102-111.
 - b) TSB(F?)/GEM D 104 a.
- 2. Historical-political Poetry.
- 2.1 Tatkan ikala. "History", "The Song of the Forefathers". (B (A) V 1.)
 - 2.1.0.1 (Collection of single stories, which appear in Tatkan ikala-fragments; written down in 1640.) IU/Salcedo 1908: 125-134.
 - 2.1.0.2 (From the creation of the world to the great Neles.) (The beginning of the texteme is realized three times.) TSBF and ISUF/Graetz 1958.
 - 2.1.0.3 "La Historia de la Antigüedad de Indios de San Blas después del Tiempo de Diluvio Universal." IU/Nordenskiöld 1938: 126-224.
 - 2.1.0.4 "Historia" (Flood, Ipeorkun (cf. also Keeler 1955 b), Neles.) IU/Nordenskiöld 1928 a: 79-93.
 - 2.1.0.5 "Historia, los Nombres de Neles, la Vida de Ibeorgun." (Flood, Ipeorkun, Neles.) IU/Nordenskiöld 1938: 228-277.
 - 2.1.1 The Mythical Age.
 - 2.1.1.1 "Creación del mundo." IU/Alba 1950: 54 seq.
 - 2.1.1.2 "The Creation of the World." IU/Nordenskiöld 1930 a: 30-35.
 - 2.1.1.3 (The first humans.) T(?)SU/Reverte 1961: 120-123.
 - 2.1.1.4 (The first humans.) IU/Alba 1947: 21-30.
 - 2.1.1.5 "Legends told by Justino Nibio from Pae, Darién." IU/Wassén 1938: 102-116.
 - 2.1.1.6 Ni ikala. ("The Story about the Moon.") ISU/Holmer 1951: 144-157.

- 2.1.1.7 "La vida de machi olotualipipilel con mucabayai." IU/GEM 35.15.90 (partly also in Wassén 1938: 100 seq.).
- 2.1.1.8 "The Incest motif." IU/Wassén 1938: 99–101.
- 2.1.1.9 "La corta de Palu-uala" and "Porqué la luna tiene la cara manchada".
 a) IU/Wassén 1934 a: 3–7 (cf. Wassén 1934 b).
 b) ISU/Wassén 1937: 14–24.
- 2.1.1.10 "Tbuhuala—the Tree of Life." IU/Wassén 1938: 122–124.
- 2.1.1.11 "The Story of the Fire." ISU/Holmer 1951: 140–141.
- 2.1.1.12 (The Flood.) (Recorded 1887 in Paya, Darién.) IU/E. Restrepo 1888: 116.
- 2.1.2 The great Neles. (Macrostructure A.)
- 2.1.2.1 Nekapillikan ikala. "Lesson on the Structure of the World." (First Nele-cycle.) ("Traditions concerning Neles.") IU(F)/Nordenskiöld 1938: 280–322.
- 2.1.2.2 Nekapillikan ikala. (First Nele-cycle.) ("The deads of the old, great neles.") IU(F)/Wassén 1938: 73–98.
- 2.1.2.3 "Historia de Cuna." IU/Wassén 1952: 100–105.
- 2.1.2.4 "The Ancient Indian History of San Blas Indians." (Nele Kupilele and Nele Purpakana.) IU/Robinson, Ms: 34–36 (=GEM B. 110 70).
- 2.1.2.5 "The Story of the Gold." ISU/Holmer 1951: 130–133.
- 2.1.2.6 "The Story of Organ, the Man of Gold." IU/Wassén 1949: 126–131.
- 2.1.2.7 "Historia Antigua de la Comarca de San Blas." (Second Nele-cycle.) IU/Wassén 1952: 90–99.
- 2.1.2.7 A "How the Cunas got Tobacco." (Not a Nele story, but with a content similar to 2.1.2.7, and also with Macrostructure A.) IU/Wassén 1938: 136–140.
- 2.1.2.8 Nersole ikala. ("The Story about Nelesole (Game owners).") ISU/Holmer 1951: 138–139.
- 2.1.3 Migrations and foundations of Villages
- 2.1.3.1 (Foundation of a village) (Written down 1887 in Paya, Darién.) IU/E. Restrepo 1888: 115 seq.
- 2.1.3.2 "El Origen de los Indios Cunas." IU/Wassén 1949: 62–64.
- 2.1.3.3 "Historia antigua de la Raza Cuna." IU/Wassén 1949: 64–66.
- 2.1.3.4 "The Peopling of ten Cuna Villages." IU/Wassén 1949: 77–86.
- 2.1.3.5 Olopatte. ("The Golden Platter.") ISU/Holmer 1951: 140–145.

- 2.1.3.6 "The History of the Founding of Nargana." IU/Wassén 1938: 21-24.
- 2.1.3.7 "Historia de la región de Carti." IU/Nordenskiöld 1938: 22-25.
- 2.1.4 The Post-Columbian Period.
- 2.1.4.1 (Fights with Spaniards.) IU/Santa Teresa 1959: 187.
- 2.1.4.2 "Breves narraciones acerca de la revolución de 1925." (Acculturated text.) U/Wassén 1949: 101-103.
- 2.1.4.3 "Breves biografías de nuestros antepasados abuelos." (Acculturated text.) U/Wassén 1949: 96-99.
- 2.1.4.4 "Algo sobre la vida de saila Charles Robinson." (Acculturated Text.) U/Wassén 1949: 99-101.
- 2.1.4.5 "El viaje del señor Hayans para Caimán." (This is the only known specimen of a journey description, of which there must be many (cf. Gasso 1912: 133). They furnish material and models for textemes with the macrostructure A. (Journeys in the outside world).) I(?)U/Wassén 1963: 92-96; 1964 b.
- 2.1.4.6 (Political speeches.) (These are not strictly literature, but are closely connected to it as far as form and content are concerned.) U/
 a) Wassén 1938: 50-53.
 b) Nordenskiöld 1938: 92-104.
 c) Nordenskiöld 1938: 376 seq.
- 2.2 Pap ikala. "The path to God" (A V 2).
- 2.2.1 Pap ikala. ("Tios-Igala" (Ed.)) T(?)SU/Reverte 1961: 117-119.
- 2.2.2 Pap ikala. IU/Wassén 1938: 118-122.
- 2.2.3 Pap ikala. ("The journey through the next world.") (This could be classed with 2.1.2.1 or 2.1.2.2. It would then be the journey of Nele Pailipe.) IU/Nordenskiöld 1930 a: 36-47.
- 2.3 Animal Tales (C V3).
- 2.3.1 "El Perro y el Machango."
 a) IU/Wassén 1934 a: 7-8.
 b) ISU/Wassén 1937: 24-26.
- 2.3.2 "El Tigre y el Fuego."
 a) ISU/Wassén 1934 a: 8-11.
 b) ISU/Wassén 1937: 27-29.
- 2.3.3 "El Tigre y la Tortuga."
 a) IU/Wassén 1934 a: 11-12 (2 versions).
 b) ISU/Wassén 1937: 29-30.
- 2.3.4 "El Escarabaja y la Araña."

- a) IU/Wassén 1934 a: 13–14.
- b) ISU/Wassén 1937: 31–34.
- 2.3.5 “La Guerra de las Aves.” IU/Wassén 1934: 14–15.
- 2.3.6 “Dada Tomorcua y Icalobandule” (Tortoise and jaguar).
IU/Wassén 1934 a: 15.
- 2.3.7 “El Machango y la Tortuga.” IU/Wassén 1934 a: 15–16, 32–33.
- 2.3.8 “El Tigre y el Machango.” IUF/Wassén 1934 a: 16–17.
- 2.3.9 “De como aprendieron los Cunas a llorar la muerte de los suyos.”
IU/Wassén 1934 a: 17.
- 2.3.10 “The Tiger and the Agouti.” ISU/Holmer 1951: 118–119.
- 2.3.11 “Tippilele and the Monkey.” (This is a Nele story with the
structure and content of an animal story.) ISU/Holmer 1951:
120–121.
- 2.3.12 “The Turtle and the Alligator.” ISU/Holmer 1951: 120–121.
- 2.3.13 “The Frog that substituted for a Niece.” Classification question-
able.) IU/Wassén 1949: 119–120.
- 2.3.14 “Nono olokwa—The Round Head.” (Classification question-
able.) IU/Wassén 1949: 120–121.
- 2.3.15 “The Voyage of an Old Woman to the Vulture Village.”
(Classification questionable.) IU/Wassén 1949: 121–122.
- 2.3.16 Sususappin. (Classification questionable.) IU/Holmer 1951:
156–157.
- 3. Simple Texts.
- 3.1 The Origin of Things (saila ikala) (D VI).
- 3.1.1 Napaneka e purpa. “The Origin of the World.” TSU/GEM
B. 14406 (1st part).
- 3.1.2 “Drawing to a Medicine Song.” KTSU/Nordenskiöld 1930 a:
71–73, Tab. VIII.
- 3.1.3 “Origin of ,bisep’.” KTSU/Nordenskiöld: 1938: 620–622, Tab.
XII.
- 3.1.4 “La Creación de las Tortugas.” IU/Nordenskiöld 1938: 389–393.
- 3.1.5 Tiol saila ikala. “Origin of the Scorpion.” K/Nordenskiöld 1938:
Tab. II–IV.
- 3.1.6 “The Creation of ‘Uédar’, the Wild Pig.” TSU/Wassén 1938:
144–148.
- 3.1.7 —(The number of known saila ikalas in (K) is exceptionally
large. Here are just a few examples.)
GEM 27.27.1432 Nos. 7, 8, 9, 10, 14, 17;

- GEM 27.27.1434 Nos. 2, 3, 5, 6, 8, 11, 12, 16, 24, 25;
 GEM 27.27.1438 Nos. 1; GEM 27.27.1440 No. 3;
 GEM 27.27.1443 Nos. 1, 6; Nordenskiöld 1928 a: Tab. III.
- 3.2 Admonitions (uanaet) (D VII).
- 3.2.1 To medicine plants (ina ikala).
- 3.2.1.1 a) Nika kannoeti ikala. "Song to strengthen nika (physical and spiritual strength)." KTS/GEM B. 11017.
 b) Nika kannoeti ina. "Medicine to increase nika." TS (Literature writing) and K/GEM 31.27.4 No. 20–22.
- 3.2.1.2 Ueti ina uanaet. "The exhortation of a medicine against fever." (Prescription against fever.) TSU/Wassén 1938: 153–155.
- 3.2.1.3 "... on 'Nele-nusa', the Stone for Fever." KTSU/Nordenskiöld 1938: 576, Tab. X.
- 3.2.1.4 "Song before gathering Medicinal Herbs for the Treatment of Sick Children." TMUF/Densmore 1926: 16–17.
- 3.2.1.5 Nipal nakrus ikala. "Song to a Cross made of Nipal (*Cyclantus bipartitus*)." TSU/GEM B. 16562.
- 3.2.1.6 "Incantation for subduing insanity". KTSU/Nordenskiöld 1930 a: 68–70, Tab. VI–VII.
- 3.2.1.7 "Symptoms of, and Medicines for, 'Purua', Epilepsy." TSU/Nordenskiöld 1938: 533–541.
- 3.2.1.8 "Medicines for Curing Haemorrhage." TSU/Nordenskiöld 1938: 510–516.
- 3.2.1.9 "Sore throat." TSU/Nordenskiöld 1938: 519–522.
- 3.2.1.10 Poni tu ikala opurret. ("Against Evil Dreams.") TSU/Nordenskiöld 1938: 524–526.
- 3.2.1.11 "For Boils." TSU/Nordenskiöld 1938: 526–528.
- 3.2.1.12 "'Hen-pecked' Medicine and the Song for it." TSU/Nordenskiöld 1938: 529–533.
- 3.2.1.13 Naipe ina. "Medicine against Snake (Bites)." (On the origin of snake medicine cf. Gisbourne 1853: 159.)
 a) K and TSU/Nordenskiöld 1928 b: 25–48, Tab. 1, 2; 1938: 399–414, Tab. V–VI.
 b) K/GEM 27.27.1434 Nos. 19–23.
 c) KF/GEM 27.27.1436 Nos. 3–5.
 d) K(F?)/GEM 27.27.1443. No. 4.
 e) TS (Literature writing)/GEM 35.15.91. a Nos. 1–4.
- 3.2.1.13 A Naipe ikala. "Snake-Song." (Classification questionable.) K/GEM 27.27.1432 Nos. 12–11.

- 3.2.1.13 B Naipe saila ikala. "Lesson on the Origin of the Snake." (Subcontexteme VI) K/GEM 27.27.1434 No. 18.
- 3.2.1.13 C Naipe namakket. "Snake Song." (Classification questionable.) TSMU/Garay 1930: 63–65.
- 3.2.1.14 Pisepa ikala, "Song to the Pisepa Plant". KTSU/Nordenskiöld 1938: 613–619, Tab. XI.
- 3.2.2 To Animals.
- 3.2.2.1 A Esawala ikala. "Song to the Iron Point." (As far as the contents are concerned, this does not belong in this group, but in every other respect.—Cf. Roberts 1827: 49.)
- a) TSU/Holmer 1951: 88–93.
- b) TSB/GEM D 101 A, B.
- c) TU/Keeler 1960: 23 seq.
- 3.2.2.1 B Esawala saila ikala. "Lesson on the Origin of the Iron Point." (Subcontexteme VI.) K/GEM 27.27.1434 Nos. 9–10, 13–14.
- 3.2.2.2 Kannir sunmakket ikala. ("The Song of the Chicken.") TSU/Holmer 1951: 188–191.
- 3.2.2.3 No ki namakket. ("The Song of the Frog.")
- a) TSU/Holmer 1951: 114–115.
- b) TSB/GEM B. 103 A.
- c) TSU/Wassén 1938: 175–177.
- 3.2.2.4 Sikkwi ki namakket. ("The Songs of the Birds.")
- a) TSU/Holmer 1951: 94–103.
- b) TSB/GEM D 102 A, B.
- 3.2.2.5 Kiplo ki namakket. "Song of the Kiplo Birds." TU/Keeler 1956: 125 seq.
- 3.2.2.6 Salli ki namakket. ("The Song of the Woodpecker.")
- a) TSU/Holmer 1951: 114–117.
- b) TSB/GEM D 105 A.
- 3.2.2.7 Suir ki namakket. ("The Song of the Quail.")
- a) TSU/Holmer 1951: 110–111.
- b) TSB/GEM D 103 B.
- c) TSB/Graetz 1958.
- d) TU/GEM 1947.19.52 No.9.
- 3.2.2.8 Pulu ikala. ("Song of the Wasp.")
- a) TSU/Holmer 1951: 92–95.
- b) ("Oración para hipnotisar las avispas.") TS (Literature writing), GEM 38.40.270.
- 3.2.2.9 Samu ikala. ("The Song of the Termites.")

- a) TSUF/Holmer 1951: 94–95.
- b) TSB/GEM D 107 B.
- 3.2.2.10 Tulup ki namakket. (“The Song of the Lobster.”)
 - a) TSU/Holmer 1951: 112–113.
 - b) TSB/GEM D 104 B.
- 3.2.2.11 Parko ki namakket. (“The Song of the Shell.”) TSU/Nordenskiöld 1938: 652–656.
- 3.2.2.12 “Song connected with Charm for Catching Turtles.” TMU/Densmore 1926: 27–28.
- 3.2.2.13 “Incantation for Hunting and Fishing.” TSU/Holmer 1951: 174–175.
- 3.2.3 To Pests.
- 3.2.3.1 Wekko ki namakket. “Song of the Wekko-birds.”
 - a) TSU (Literature writing)/Nordenskiöld 1930 a: 64–67; K/GEM 27.27.1447.
 - b) K/Nordenskiöld 1938: Tab. VIII.
 - c) K/Nordenskiöld 1938: Tab. XIII.
 - d) K/Nordenskiöld 1938: Tab. XIV.
 - e) KF and TSU/Nordenskiöld 1938; 623–631, Tab. XV A.
 - f) K/GEM 38.45.266. Nos. 5, 8, 7–6 a, 13.
 - g) “The Incantation to precede the Uéko-Song.” (Classification not quite clear.) TSU/Nordenskiöld 1938: 631–642.
- 3.2.3.2 Wekko naípe epokwa. “Wekko-bird and Snake together.” TU/Keeler 1956 c: 124 seq.
- 3.2.3.3 Ukunaípe ikala. “Song of the Rattlesnake.” TSU/GEM B. 15369.
- 3.3 Personal Poetry (D VIII, IX).
- 3.3.1 Cradle Songs (D VIII).
- 3.3.1.1 Purikana kala namakket. “Song for the little Ones.” TSU/Holmer 1951: 176 seq.
- 3.3.1.2 Purwikana ka namakket. “Song for the Little Ones.” TSU/Holmer 1951: 176 seq.
- 3.3.1.3 (Cradle Song for Boys.) TSU/Holmer 1951: 178 seq.
- 3.3.1.4 (Cradle Song for Girls.) TSU/Holmer 1951: 178 seq.
- 3.3.1.5 (Cradle Song.) TSU/Holmer 1951: 178 seq.
- 3.3.1.6 Omekan namakketi mimmimar kala. “Song of the Women to the Little Children.” TSU/Holmer 1951: 180 seq.
- 3.3.1.7 (Cradle Song.) TSU/Holmer 1951: 182 seq.
- 3.3.2 Lyrics (D IX).

- 3.3.2.1 Nipa namakket ikala. ("The Flying Song.") TSU/Holmer 1951: 170-171.
- 3.3.2.2 Namakket ikala. "Song of the Song." TSU/Holmer 1951: 170-175.
- 3.3.2.3 ("Love Song.") TSB/Graetz 1958.
- 3.3.2.4 "Love Song." (Acculturated, cf. Marshall 1950: 225.) TMU/Densmore 1926: 34.
- 3.3.2.5 "Prayer at Night." (Acculturated text.) TSU/Holmer 1951: 176-177.
- 3.3.3 Humorous Songs (D IX).
- 3.3.3.1 "Where the River begins." TMU/Densmore 1926: 33-34.
- 3.3.3.2 "Seen through a Spyglass." TMU/Densmore 1926: 31-32.
- 3.3.3.3 "The Boat Race." TMU/Densmore 1926: 29-31.
- 3.3.3.4 Wippoet ki namakket. "Song for becoming sober."
 - a) TSUF/Nordenskiöld 1938: 555-557.
 - b) TSU/Wassén 1938: 168-175.
 - c) (?)K/GEM 27.27.1440 Nos. 4-5.

BIBLIOGRAPHY

(Only those sources (with a few exceptions) which are quoted in the thesis are listed, not all those which were looked through. The literature on the Cuna alone comprises more than 500 titles. These are almost all presented in Marshall 1950 and include little relevant to the subject of this thesis.)

- ACKERKNECHT, ERWIN H.: 1963. Medical Practices. In: *Handb. of South Am. Indians*, Vol. V. New York: 621-643.
- ADORNO, THEODOR W.: 1964. Zur Logik der Sozialwissenschaft. In: *Kölner Ztschr. f. Soz. u. Sozialpsych.*
- ALBA, C., M. M.: 1947. Hombres y dioses cunas. La creación del mundo cuna. Panamá. — — : 1950. Introducción al estudio de las lenguas indígenas de Panamá. Panamá.
- AREVALO, ANTONIO: 1761. Descripción del golfo de Urabá é istmo del Darién. Ms. Cartagena 31. III. 1761. Repr. in *Cuervo* 1891seq., vol. II: 251-273.
- ARIZA, ANDRES DE: 1774. Comentos de la Rica y Fertilisima Provincia de Santa-Maria la Antigua del Darién. Al virrey Guirrior. Ms. Biblioteca Nal., Bogotá. Partly cit. in: *Viaje del Lionel Wafer al Istmo del Darién*, ed. by V. Restrepo, Bogotá 1888; Pinart 1887: 126-7.
- ARMSTRONG, ROBERT PLANT: 1959. Content analysis in Folkloristics. In: *Trends in content analysis*, ed. by Ithiel de Sola Pool, Urbana 1959: 151-170.
- BARBOUR, JAMES SAMUEL: 1907. A history of William Patterson and the Darién Company. Edinburg and London.
- BARTHEL, THOMAS S.: 1958. Grundlagen zur Entzifferung der Osterinselschrift. Universität Hamburg, Abhandl. aus dem Gebiet der Auslandskunde, Bd. 64, Reihe B, Bd. 36. Hamburg.
- BARTHESS, ROLAND: 1964. Mythen des Alltags. Edition Suhrkamp Bd. 92, Frankfurt a.M.
- BARTLETT, F. C.: 1965. Some experiments on the reproduction of folk stories. In: *The study of folklore*, ed. by A. Dundes, Englewood Cliffs, N. J.: 243-258.
- BASCOM, WILLIAM R.: 1965. Four functions of folklore. In: *The study of folklore*, ed. by A. Dundes, Englewood Cliffs, N. J.: 279-298.
- BEACH, REX: 1921. On shoot. New York.
- BELL, ELEANOR YORKE: 1909. The republic of Panama and its people, with special reference to the indians. Ann. Rep., Smiths. Inst., Washington: 607-637.
- BENSE, MAX: 1965. Zusammenfassende Grundlegung moderner Ästhetik. In: *Mathematik und Dichtung*, ed. by R. Gunzenhäuser and H. Kreuzer, München: 313-332.
- BERENDT, C. HERMANN: 1874. The Darién language. Paper read before the Am. Ethnol. Soc., Am. Historical Record 3: 54-59.
- BERENGUERAS, JOSE: 1934. Rudimentos de Gramática Karibe-Kuna. Panamá.

- BIERWISCH, MANFRED: 1965. Poetik und Linguistik. In: *Mathematik und Dichtung*, ed. by R. Gunzenhäuser and H. Kreuzer, München: 49–65.
- — : 1966. *Strukturalismus. Geschichte, Probleme und Methoden. Kursbuch* 5: 77–152.
- BJÖRNBERG, BIRGITTA: 1961. *Textilkonst hos Cunaindianerna. Konstperspektiv*, vol. 17, No. 3: 14–15.
- BOGATYREV, P.: 1931. *Příspěvek k strukturální etnografii. Slovenska miscellanea*. Bratislava.
- — : 1935. *Funkčno-štrukturálna metoda e iné metódy etnografie i folklóristiky. Slovenské pohľady* LI, 10.
- BOWRA, C. MAURICE: 1952. *Heroic poetry*. London.
- — : 1967. *Poesie der Frühzeit*. München. (Engl. ed.: *Primitive song*, London 1962.)
- BROWN, LADY RICHMOND: 1925. *Unknown tribes, uncharted seas*. New York.
- BURKE, KENNETH: 1966. *Dichtung als symbolische Handlung. Eine Theorie der Literatur*. Edition Suhrkamp Bd. 153. Frankfurt a.M. (Engl. ed.: *The philosophy of literary form*, New York 1941.)
- CARTA ORGANICA DE LOS INDIOS DE SAN BLAS. Panamá. Ley 16 del 19.2. 1953.
- CHADWICK, H. MUNRO and N. KERSHAW: 1932. *The growth of literature*, vol. I.
- — : 1936. *The growth of literature*, vol. II.
- — : 1940. *The growth of literature*, vol. III. Cambridge.
- CHERRY, COLIN: 1963. *Kommunikationsforschung — eine neue Wissenschaft*. Frankfurt a.M. and Hamburg.
- CHOMSKY, NOAM: 1957. *Syntactic structures*. *Janua Linguarum*, 4. The Hague.
- CUERVO, ANTONIO B.: 1891–1894. *Colección de documentos inéditos sobre la geografía y la historia de Colombia*. vols. I–IV. Bogotá.
- CULLEN, EDWARD: 1851. *Vocabulary of the language of the Yule indians, who inhabit the rivers and the coast of Darién, from the mouth of the Atrato to the coast of San Blas*. Jr. Roy. Geogr. Soc. 21: 241–242. Repr. in Cullen 1853.
- — : 1853. *Isthmus of Darién ship canal; with a full history of the Scotch colony of Darién*, London.
- CUNDALL, FRANK: 1926. *The Darién venture*. (*Hispanic Notes and Monographs*.) New York.
- DAVIS, CHARLES H.: 1866–1867. *Report on interoceanic canals and railroads between the Atlantic and Pacific oceans*. Washington.
- DENSMORE, FRANCIS: 1925. *Study of the Tule indian music*. In: *Explorations and field-work of the Smiths. Inst.* in 1924: 115–127. *Smiths. Misc. Coll.* 77, 2. Washington.
- — : 1926. *Music of the Tule indians of Panamá*. *Smiths. Misc. Coll.* 77, 11. Washington.
- DE SMIDT, LEON S.: 1948. *Among the San Blas indians of Panamá*. Troy.
- DIELS, HERRMANN: 1922. *Himmels- und Höllenfahrten von Homer bis Dante*. *Neue Jahrb. f. das klassische Altertum, Gesch. u. dt. Lit. u. f. Pädag.* Bd. XXV: 231–253.
- DUNDES, ALAN: 1964. *The morphology of North American indian folktales*. FFC No. 195. Helsinki.
- FEENEY, CORINNE B.: 1941. *Arch-isolationists: the San Blas indians*. In: *Nat. Geogr.*, vol. 79, 2. Washington.

- FESTUGIERE, R. P.: *1950. *La Révélation d'Hermès Trismégiste. Vol.I: L'Astrologie et les Sciences Occultes.* Paris.
- FISCHER, J. L.: 1963. The sociopsychological analysis of folktales. In: *Current Anthr.*, 4: 235-295.
- FOCK, NIELS: 1963. *Waiwai. Religion and society of an Amazonian tribe.* National-museets skrifter, Etnogr. Raekke, VIII. Kopenhagen.
- FODOR, JERRY A. and KATZ, JERROLD J. (Eds.): 1964. *The structure of language. Readings in the philosophy of language.* Englewood Cliffs, N.J.
- FRANCO, JUAN: Ms. Breve noticia o apuntes de los usos y costumbres de los habitantes del Ysthmo de Panamá, y de sus Producciones. Para la expedición de los Corvertas al reedor del Mundo, por encargo que hizo el Fh. Coronel de Guardias Dn. Anto. Pineda al Presbytero d. Juan Franco. Noticia de los Yndios Guaimies, y de sus Costumbres. (Ms. in San Francisco; Copy in Ethnogr. Mus., Göteborg (B. 234).)
- FRAZER, JAMES GEORGE: 1963. *The golden bough. A study in magic and religion.* (Abridged Edition.) London. (First ed. 1922.)
- FÜGEN, HANS NORBERT: 1964. *Die Hauptrichtungen der Literatursoziologie und ihre Methoden. Ein Beitrag zur literatursoziologischen Theorie.* (Abhandl. zur Kunst-, Musik- und Lit.wiss., Bd. 21.) Bonn.
- GALVEZ G., ALBERTINA: 1952. *Con los Indios Cunas de Panamá.* Editorial del Ministerio de Educación Publica, vol. 31. Guatemala.
- GARAY, NARCISO: 1930. *Tradiciones y Cantares de Panamá.* Ensayo Folklorico. Panamá.
- GASSÓ, LEONARDO: 1908. *Gramática Karibe-Kuna.* Barcelona.
- — : 1912. (vol. XX of:) *La mision de San José de Narganá entre los Karibes.* (Las Misiones Católicas. Revista Quincenal Ilustrada Organ oficial en españa de la Obra de la Propagación de la Fe. Barcelona 1910-1914, vol. XVIII-XXII.)
- GISBORNE, LIONEL: 1853. *The isthmus of Darién in 1852. Journal of the expedition of inquiry . . .* London.
- GRAETZ, ERICH: 1958. *Taperecordings; February 1958, Panamá.* Recitations of Ikwaniktippipi and Severino Colman. (One copy is in the Hamburgisches Museum für Völkerkunde und Vorgeschichte. The tape comprises: Tatkan ikala, (I), Kammu ikala, flute music (I), Masala ikala, flute music (II), Tatkan ikala ((beginning) (II), (III), (IV)), Suir ki namakket, "Love song"; with a commentary by Graetz).
- GREENWAY, JOHN: 1964. *Literature among the primitives.* Hatboro, Penns.
- HAMMEL, EUGENE A. (Ed.): 1965. *Formal semantic analysis.* Am. Anthr., Spec. Publ. 67, No. 5, pt. 2.
- HARRIS, REGINALD GORDON: 1926 a. *The San Blas indians.* Am. Jr. of Physical Anthr., vol. IX, No. 1: 17-63.
- — : 1926 b. *Los Indios Tule de San Blas.* Panamá.
- HARRIS, ZELLIG S.: 1952. *Discourse analysis.* Language 28: 1-30.
- — : *1963. *Structural linguistics.* Chicago and London.
- — : 1963. *Discourse analysis reprints. Papers on formal linguistics 2.* The Hague.
- — : 1964. *Distributional structure.* In: Fodor and Katz 1964: 33-49.

- HARRISSON, TOM: 1965. Borneo writing. In: *Bijdragen tot de Taal-, Land- en Volkenkunde*, 121: 1-57.
- — : 1966. A Kalimantan writing-board and the Mamat festival. In: *Harrisson (Ed.) 1966*: 287-295.
- — : (Ed.): 1966. Borneo writing and related matters. *Sarawak Mus. Jr., Spec. Monogr.*, Nr. 1. Kuching.
- HARRISSON, TOM and SANDIN, BENEDICT: 1966. Borneo writing boards. In: *Harrisson (Ed.) 1966*: 32-286.
- HERRMANN, ADOLF RICHARD: 1964. Der Irresein-Komplex bei den Insel-Kuna. *Zeitschr. f. Ethnol.*, 89: 277-281.
- HERSKOVITS, MELVILLE J.: 1948. *Man and his works*. New York.
- HJELMSLEV, LOUIS: 1943. Omkring sprogteoriens grundlæggelse. *Festschrift udgivet af Københavens Universitet . . .*: 3-113. København. (Engl. trans.: *Prolegomena to a theory of language*. Madison 1963.)
- HOCKETT, CHARLES F.: 1954. Two models of grammatical description. In: *Word* 10: 210-234.
- HOLMER, NILS M.: 1946. Outline of Cuna grammar. (*Intern. Jr. of Am. ling.*, 12: 4.)
- — : 1947. Critical and comparative grammar of the Cuna language. *Etnologiska Studier* 14. Göteborg.
- — : 1951. Cuna chrestomathy. *Etnologiska Studier* 18. Göteborg.
- — : 1952 a. Ethno-linguistic Cuna dictionary. *Etnologiska Studier* 19. Göteborg.
- — : 1952 b. Inatopipiller; or the adventures of three Cuna boys. *Etnologiska Studier* 20. Göteborg.
- — : 1953. Some semantic problems in Cuna and Kaggaba. *Intern. Anthr. and Ling. Rev.*, I, 2-3: 195-200.
- HOLMER, NILS M. and WASSÉN, S. HENRY: 1947. Mu-Igala, or the way of Muu, a medicine song from the Cunas of Panamá. Göteborg.
- — : 1953. The complete Mu-Igala in picture writing. *Etnologiska Studier* 21. Göteborg.
- — : 1958. Nia-Ikala. Canto Magico para curar la locura. *Etnologiska Studier* 23. Göteborg.
- — : 1963. Dos Cantos Shamanisticos de los Indios Cunas. *Etnologiska Studier* 27. Göteborg.
- HRDLICKA, ALES: 1926. The indians of Panamá and their physical relation to the Mayas. *Am. Jr. Phys. Anthr.* 9, 1: 1-15.
- HULTKRANTZ, ÅKE: 1957. *The North American indian orpheus tradition*. Stockholm.
- HYMAN, STANLEY EDGAR: 1965. The ritual view of myth and the mythic. In: *Myth*, ed. by Th. A. Sebeok, Bloomington and London.
- IGLESIAS, ALCIBIADES et al.: 1951. Tule kaya sunmakket wilup kan. (Fibel der Kuna-Sprache.) Ailigandi.
- IGLESIAS, MARVEL ELYA and MORGAN, CHRISTINE HUDGINS: 1939. From the cradle to the grave, the story of a typical San Blas maiden. Cristobal.
- JAKOBSON, ROMAN: 1960. Linguistics and poetics. In: *Style in language*, ed. by Th. A. Sebeok, Cambridge, Mass.: 350-377.
- — : 1965. Poesie der Grammatik und Grammatik der Poesie. In: *Mathematik und Dichtung*, ed. by R. Gunzenhäuser and H. Kreuzer. München.
- JENSEN, ERIK: 1966. The Iban world. In: *Harrisson (Ed.) 1966*: 1-31.

- JOLLES, ANDRE: *1965. Einfache Formen. Tübingen.
- KATZ, JERROLD J.: 1966. The philosophy of language. New York and London.
- KATZ, JERROLD J. and FODOR, JERRY A.: 1963. The structure of a semantic theory. *Language* 39: 170-210. (Also in Fodor and Katz 1964: 497-518.)
- KAYSER, WOLFGANG: *1964. Das sprachliche Kunstwerk. Eine Einführung in die Literaturwissenschaft. Bern und München. (First ed. 1948.)
- KEELER, CLYDE E.: 1954 a. Theory and practice of medicine in San Blas. November in Panamá, 1954: 8, 9, 26.
- — : 1954 b. The burial of a Cuna indian girl. *Jr. of the Tennessee Academy of Science* 29: 297-304.
- — : 1954 c. San Blas burial. June in Panamá, 1954.
- — : 1954 d. Cuna indian beliefs concerning the afterlife. *Jr. of the Tennessee Academy of Science* 29: 153-162.
- — : 1955 a. Cuna uchu and catholic saints. *Jr. of the Tennessee Academy of Science* 30: 203-211.
- — : 1955 b. Ipeorkun, cultural hero of San Blas. January in Panamá, 1955: 20-21, 25.
- — : 1956 a. More about uchu in San Blas. *Jr. of the Tennessee Academy of Science* 31: 171-176.
- — : 1956 b. The meaning of the inna feast. *Bull. of the Georgia Academy of Science* 14: 81-88.
- — : 1956 c. Land of the moon-children. The primitive San Blas culture in flux. Athens.
- — : 1957. Phallic symbols of god's creative power among the Cunas. *Bull. of the Georgia Academy of Science* 15: 16-21.
- — : 1960. Secrets of the Cuna earthmother. A comparative study of ancient religions. New York.
- — : 1964. The incidence of Cuna moon-child albinos. *Jr. Hered.* 55: 115-120.
- KRAMER, FRITZ W.: 1967 a. Die Schriftsysteme der Cuna. In: *Studium Generale*, 20. Jhg.: 574-584.
- — : 1967 b. Orale Literatur. In: F. Herrmann, *Völkerkunde Australiens*, B. I. — *Hochschultaschenbücher* 337/337 a, Mannheim 1967: 196-199.
- — : Ms. Programm für statistische Untersuchungen zum Text/Kontext-Verhältnis in der Literatur der Mongo.
- KRIEGER, HERBERT W.: 1926. Material culture of the people of Southeastern Panamá, based on specimens in the U. S. National Museum. *Smiths. Inst., Bull.* 134. Washington.
- LEHMANN, WALTER: 1920. *Zentral-Amerika*. I. Teil: Die Sprachen Zentral-Amerikas, Bd. I. Berlin.
- LÉVI-STRAUSS, CLAUDE: 1958. La geste d'Asdiwal. *Annuaire*, 1958-59. *Ecole Pratique des Hautes Etudes, Section des Sciences Religieuses*: 2-43.
- — : 1960. Traurige Tropen. Köln und Berlin. (French ed.: *Tristes Tropiques*, Paris, 1955.)
- — : 1964. *Mythologiques: Le Cru et le Cuit*. Paris.
- — : 1965. *Das Ende des Totemismus*. Edition Suhrkamp. 128. Frankfurt a.M.
- — : 1967. *Strukturelle Anthropologie*. Frankfurt a.M.
- LINNÉ, SIGVALD: 1929. Darién in the past. *The Archeology of Eastern Panamá and*

- Northwestern Colombia. Göteborgs Kungl. Vetenskaps- och Vitterhets-Samhälles Handlingar, 5. Flg., Ser. A vol. I, No. 3. Göteborg.
- LONG, CAPT. RICHARD: 1700. To the Right Honoreable the Lords Comishoners for Executing ye Office of Lord high Admirall of England, Ireland etc. Ms. Engl. Admiralty 1/2033: Captains' Letters. (Copy in Ethnogr. Mus., Göteborg, GEM B. 319.)
- LORD, ALBERT BATES: 1965. The singer of tales. New York. (1st ed. 1960 (Harvard Stud. in Comparative Literature, vol. 24).)
- LOWIE, ROBERT H.: 1963. Social and political organization of the tropical forest and marginal tribes. In: Handb. of South Am. Ind., vol. V: 313-350. New York.
- LUKACS, GEORG: 1963. Schriften zur Literatursoziologie. Ausgew. v. P. Ludz. Soziologische Texte, Bd. 9. Neuwied.
- LULL, EDWARD P.: Vocabulary of the languages of the indians of San Blas and Caledonia Bay, Isthmus of Darién. Trans. Am. Philol. Ass., 1873, vol. 4: 103-109.
- LUSSAN, RAVENEAU DE: 1705. Journal de Voyage fait a la Mer du Sud avec les Flibustiers de l'Amerique. Paris.
- MALINOWSKI, BRONISLAW: 1954. Magic, science and religion; and other essays. New York.
- MARSHALL, DONALD STANLEY: 1950. Cuna folk: a conceptional scheme involving the dynamic factors of culture as applied to the Cuna indians at Darién. Harvard University. Unpubl. dissertation.
- McKIM, FRED: 1947. San Blas, an account of the Cuna indians of Panamá./The forbidden land, reconnaissance of Upper Bayano River, R. P., in 1936. Two posthumous works ed. by H. Wassén. Etnologiska Studier 15. Göteborg.
- MENARD DE SAINT-MAURICE, E.: 1889. Contribution a l'étude de l'age de la pierre dans l'isthme de Panamá. Paris.
- METRAUX, ALFRED: 1963. Religion and shamanism. In: Handb. of South Am. Ind., vol. V.: 559-599. New York.
- MÜHLMANN, WILHELM EMIL: 1966. Erfahrung und Denken in der Sicht des Kultur-anthropologen. In: Kulturanthropologie, hg. v. W. E. Mühlmann und E. W. Müller. Neue wissenschaftliche Bibl., Bd. 9. Köln und Berlin: 154-166.
- MUKAROVSKY, JAN: 1948. Kapitoly z české poetiky. Prag. (Dt. Übers.: Kapitel aus der Poetik. Edition Suhrkamp, 230. Frankfurt a.M. 1967.)
- NORDENSKIÖLD, ERLAND: 1928 a. Indianerna på Panamanäset. Stockholm.
- — : 1928 b. Picture writings and other documents. Comp. Ethnogr. Stud. 7, 1. Göteborg.
- — : 1928 c. Cuna indian conceptions of illnesses. Festschr. P. W. Schmidt. St. Gabriel-Mödling bei Wien: 527-529.
- — : 1930 a. Picture writings and other documents by Néle, Charles Slater, Charlie Nelson and other Cuna indians. Comp. Ethnogr. Stud. 7, 2. Göteborg.
- — : 1930 b. Cuna indian religion. 23. Congr. Am.: 668-677.
- — : 1931. Cunaindianernas föreställningar om livet efter detta. Jorden Runt, Oktober 1931, Stockholm: 577-589.
- — : 1932. Gudsbegreppet hos Cunaindianerna, efter Ruben Pérez Kantule och Guillermo Haya. Göteborgs Handels- och Sjöfartstidning, 30. January. Göteborg.

- — : 1938. An historical and ethnological survey of the Cuna indians, ed. by S. Henry Wassén. *Comp. Ethnogr. Stud.* 10. Göteborg.
- OVIEDO Y VALDES, GONZALO FERNANDEZ DE: 1853. *Historia General y Natural de las Indias, Islas y Tierra-Firme del Mar Océano*. Madrid.
- PEI, MARIO: 1966. *Glossary of linguistic terminology*. New York.
- PEREZ, RUBEN (KANTULE): 1933. Conception of the dead among the San Blas indians. *Panamá American*, Panamá, 23. April.
- — : 1942. Las Molas de los Indios Cunas. *América Indígena*, vol. II, No. 1: 85.
- PIKE, KENNETH L.: 1947. Phonemics. A technique for reducing languages to writing. *Ann Arbor*.
- — : 1954, 1955, 1960. Language in relation to a unified theory of the structure of human behavior. Glendale.
- PINART, ALPHONSE: 1887. Les Indiens de l'Etat de Panamá. *Rev. d'Ethnogr.* vol. 6: 1-24, 117-132. Paris.
- — : 1890. *Vocabulario Castellano-Cuna*. Paris. (also: Panamá 1882.)
- PITTIER, HENRI: 1912. Little known parts of Panamá. *Nat. geogr. Mag.* 23: 627-652. Washington.
- PRINCE, J. DYNELEY: 1912. Prolegomena to the study of the San Blas language of Panamá. *Am. Anthr.* 14: 109-126.
- — : 1913. Grammar and glossary of the Tule language of Panamá. *Am. Anthr.* 15: 480-528.
- PROPP, VLADIMIR: 1958. Morphology of the folktale. *Indiana Univ. Res. Center in Anthr., Folk., and Ling.* Publ. 10.
- PUIG, MANUEL MARIA: 1944. *Diccionario de la lengua caribe-cuna*. Panamá.
- — : 1946. *Gramática de la lengua caribe-cuna*. Panamá.
- — : 1948. *Los Indios Cunas de San Blas*. Panamá.
- PUYDT, LUCIEN DE: 1868. Vocabulary and phrases of the Cuna language (Isthmus of Darién). In: *Account of Scientific Explorations in the Isthmus of Darién in the years 1861 and 1865*: 100-105. *Jr. Roy. Geogr. Soc.* 38: 69-110.
- RADIN, PAUL: 1955. The literature of primitive peoples. *Diogenes* 12: 1-28.
- RAGLAN, F. R. S., LORD: 1956. *The hero*. New York.
- — : 1965. Myth and ritual. In: *Myth*, ed. by Th. A. Sebeok, Bloomington and London.
- RECLUS, ARMAND: 1888. Panamá et Darién. *Voyages d'Exploration*. 1876-1878. Paris.
- RECLUS, ELISEO: 1958. Colombia. Bogotá.
- REICHARD, GLADYS A.: 1963. Navaho religion. A study of symbolism. *Bollingen Ser. XVIII*. New York.
- RESTREPO TIRADO, ERNESTO: 1888. Costumbres de los Indios Darienitas. In: *Viaje del Lionel Wafer al Istmo del Darién*. Ed. by V. Restrepo. Bogotá 1888: 113-129.
- REVERTE, JOSE MANUEL: 1961. Rio Bayano, "Region de Mañana". Panamá.
- ROBERTS, ORLANDO W.: 1827. *Narrative of voyages and excursions on the East Coast and in the interior of Central America*. Edinburgh.
- ROBINSON, WILLIAM ALBERT: Ms. Among the Mulatas Archipelago. (Copy in *Ethnogr. Mus.*, Göteborg, GEM B 11070.)
- ROCK, JOSEPH F.: 1947. The ancient Na-khi kingdom of Southwest China, 2 vol. Cambridge, Mass.

- — : 1955. The 'Zhi 'Mä funeral ceremony of the 'Na-'khi of Southwest China. *Studia Instituti Anthropos*, Bd. 9. Wien-Mödling.
- ROCK, JOSEPH F. and JANERT, K.: 1965. Na-khi manuskripts, Bd. 1-2, Verzeichnis der Orientalischen Handschriften Deutschlands, Bd. VII, 1-2. Wiesbaden.
- ROMOLI, KATHLEEN: 1953. Balboa of Darién. Discoverer of the Pacific. New York.
- SALCEDO, JUAN REQUEJO: 1908. Relación Histórica y Geográfica de la Provincia de Panamá. In: *Relaciones Históricas y Geográficas de América Central*. Col. de libros y documentos referentes á la Historia de América, vol. VIII, Madrid. (Written 1640.)
- SANTA TERESA, FRAY SEVERINO DE: 1959. Los Indios Catios, los Indios Cunas. Autores Antioqueños, vol. 7. Medellín.
- SAUSSURE, FERDINAND DE: (1915) 1965. *Cours de Linguistique Générale*. Publ. par Bally, Sechehaye, Riedlinger. Paris.
- SCHOLEM, GERSHOM G.: 1954. Major trends in Jewish mysticism. New York.
- SEBAG, LUCIEN: 1967. *Marxismus und Strukturalismus. Theorie 2*. Frankfurt a.M. (French ed.: *Marxisme et Strukturalisme*, Paris, 1964).
- SEBEOK, THOMAS A. and INGEMANN, F. J.: 1956. Structural and content analysis in folklore research. In: *Studies in Cheremis: The supernatural*. Viking Fund Publ. in Anthr. 22: 262-263. New York.
- SEVERIN, KURT: 1953. A San Blas indian girl comes of age. *Nat. Hist.* 72, 1: 8-15. New York.
- SMITH, HARMODIO: 1958. Autoridades Panameñas solicitan a "Nele" (Mago). In: *Juventud San Blaseña, Organo de la Juventud de San Blas*. No. IV, 2. ép., Nov. 1958, Nargana.
- STEINITZ, WOLFGANG: 1934. Der Parallelismus in der finnisch-karelischen Volksdichtung. FF C, No. 115, Helsinki.
- STOUT, DAVID B.: 1947 a. San Blas Cuna acculturation: An introduction. Viking Fund Publ. in Anthr. 9. New York.
- — : 1947 b. Ethno-linguistic observations on San Blas Cuna. *Intern. Jr. of Am. Ling.* 13, 1: 9-12.
- — : 1963. The Cuna. In: *Handb. of South Am. Ind.*, vol. IV: 257-268. New York.
- TINNIN, J. V.: 1940. Roughing it in the San Blas islands. Panamá.
- TOPITSCH, ERNST: 1966. Seelenglaube und Selbstinterpretation. In: *Sozialphilosophie zwischen Ideologie und Wissenschaft. Soziologische Texte* 10: 181-225. Neuwied.
- TORRES DE IANELLO, REINA: 1957. *La Mujer Cuna de Panamá*. Ediciones Especiales del Instituto Indigenista Interamericano. México.
- — : 1958. Aspectos culturales de los indios Cunas. *Anuario de estudios americanos* XV: 515-547. Sevilla.
- TYNANOW, JURIJ: 1967. Die literarischen Kunstmittel und die Evolution in der Literatur. Edition Suhrkamp, 197. Frankfurt a.M.
- TYNANOW, JURIJ and JAKOBSON, ROMAN: 1966. Probleme der Literatur- und Sprachforschung. In: *Kursbuch* 5: 74-76.
- ULDALL, H. J.: 1957. Outline of glossematics, a study in the methodology of the humanities with special reference to linguistics. Vol. I: General theory. *Trav. du Cercle ling. de Copenhague*, vol. X.
- VALDES, RAMON M.: 1890. *Geografia del istmo de Panamá*. Bogotá.

- VIGUIER, C.: 1873. Notes sur les indiens de Paya. Mém. de la Soc. d'Anthr. de Paris. 2. Ser., vol. 1: 411-422. Paris.
- WAFER, LIONEL: 1903. A new voyage and discription of the Isthmus of America. Ed. by G. Parker Winship. Cleveland. (First ed. 1699.)
- — : 1934. A new voyage and description of the Isthmus of America. Ed. by L. E. Elliott Joyce. The Hakluyt Soc., Ser. 2, 73. Oxford.
- WALTON, EDA LOU and WATERMAN, T. T.: 1925. American indian poetry. Am. Anthr. 27: 25-51.
- WARBURTON, ELIOT: 1852. Darién: or, the merchant prince. 3 vols. London (First ed. 1828.)
- WASHBURN, CHANDLER: 1961. Primitive drinking. (Chapter: "Cuna", p. 143-156.) New York and New Haven.
- WASSÉN, S. HENRY: 1934 a. Mitos y cuentos de los Indios Cunas. Jr. des Am., n. s., vol. XXVI: 1-35, Paris.
- — : 1934 b. Världsträdsmotivet i några indianska myter. Ymer 54, 4: 249-261. Stockholm.
- — : 1937. Some Cuna indian animal stories, with original texts. Etnologiska Studier 4: 12-34. Göteborg.
- — : 1938. Original documents from the Cuna indians of San Blas, Panamá, as recorded by the indians Guillermo Haya and Ruben Pérez Kantule. Etnologiska Studier 6: 1-178. Göteborg.
- — : 1940. Anonymous Spanish MS. from 1738 on the province of Darién. Etnologiska Studier 10: 80-146. Göteborg.
- — : 1949. Contributions to Cuna ethnography. Etnologiska Studier 16. Göteborg.
- — : 1952. New Cuna myths, according to Guillermo Hayans. Etnologiska Studier 20: 86-106. Göteborg.
- — : 1957. Sjukdomsföreställningar och behandlingsmetoder hos naturfolken speciellt i Sydamerika. In: Föreningen Medicinhistoriska museets vänners årskrift 1957: 1-28. Stockholm.
- — : 1959. A comparative reconstruction of the post-Columbian change in certain religious concepts among the Cuna indians of Panama. 33. Congr. Am., San José 1958, II: 502-509. San José de C. R.
- — : 1961 a. Darién-avsnittet — ett hinder för Panamerikanska landsvägen. Ymer 3: 188-202. Stockholm.
- — : 1961 b. Cunaindianernas medicinmän och deras värld. Nytt och Nyttigt 3: 13-21. Göteborg.
- — : 1962. De la Identificación de los Indios Paparos del Darién. Hombre y Cultura I, 1. Panamá.
- — : 1963. Från Mexiko och Centralamerika 1962 samt Sr. Hayans resa till Rio Caimán, Colombia. Göteborgs Musei Årstryck 1959-1962: 67-96. Göteborg.
- — : 1964 a. Some words on the Cuna indians and especially their "Mola"-garments. Rev. do Mus. Paulista 15: 329-339.
- — : 1964 b. Un Indio Cuna de Panamá en Misión Etnográfica al Rio Caimán, Colombia, en 1961. In: Völkerkundliche Abhandl. Bd. I: Beiträge zur Völkerkunde Süd-Amerikas. Hannover.

- — : 1966. On some details in the cultural relationships between the indians of Northwestern South America and Southern Central America. 36. Congr. Am., Sevilla 1964, Bd. 3: 165–176.
- — : 1968. Mola. Cuna-indiansk textilkonst. 16 pp. Göteborg.
- WELLEK, RENE und WARREN, AUSTIN: 1963. Theorie der Literatur. Frankfurt a.M. and Berlin. (Engl. ed.: Theory of literature, New York 1942.)
- WESTON, JESSIE L.: 1957. From ritual to romance. New York. (First ed. 1920.)
- WHEELWRIGHT, PHILIP: 1965. The semantic approach to myth. In: Myth; a symposium, ed. by Th. A. Sebeok, Bloomington and London, 1965: 154–168. (First ed. 1955.)
- WYSE, LUCIEN: 1886. Le Canal de Panamá. Paris.
- YALMAN, NUR: 1967. 'The raw: the cooked: nature: culture'—observations on Le Cru et Le Cuit. In: The structural study of myth and totemism, ed. by E. Leach, A. S. A. Monogr., vol. 5. London.

CONTENTS

Preface	9-10
Introduction	11-13
Chapter I: The Structure of Cuna Poetry	14-68
1. On a Theory of a Poetry	14-21
Grammar, discourse, poetry — Method of discourse analysis — Method of semantic analysis — IA- and IP-models — Remark on a generative p-theory — Definition of poetic texts	
2. Microstructure	22-51
Syllabic structure of the colloquial language and syllabic structure of the poetic language — Verse matrix — Diachronics of the verse system — Syntactic relations between parallel sentences — Syntactic relations between semi-parallel sentences — Distribution of non-parallel sentences — Semantic relations between parallel sentences — Syntactic and semantic structure of the verse series — The verse series matrix — The structure of a verse group — Application of Birkhoff's measure — Compositions of verse series and their semantic structure — Examples of verse series	
3. Aspects of the Macrostructure	51-57
Cuna literature as a succession of pictures — On the analysis of the macrostructure — Actemes — Scenemes — Textemes	
4. Poetic Expressions, Metaphors, Symbols	58-64
Secondary semiological systems — Poetic expressions — Metaphors	
5. Margin and Writing	64-68
Minimal texts, maximal texts — Literature-writing	

Chapter II: Structure and Meaning of the Genres	69-108
6. Classification-structure and Meaning	69-76
Plan of additional p-theories — Basis of the classification-structure —	
Explanation of the classification-structure — The classification-	
structure in the Cuna's own interpretation	
7. Epics	77-91
Origin of the epic — Therapeutic epics — Initiation-epics — Epics for	
the dead — Entertainment-epics	
8. Historical-political Poetry	92-104
Contexteme — Texteme and text of the Tatkan ikala — Macrostructure	
of the Tatkan ikala — Content of the Tatkan ikala — Function of the	
Tatkan ikala — Conception of history of the Tatkan ikala — Pap	
ikala — Animal-tales	
9. Simple Texts	104-108
 Chapter III: Literature in Culture and Society	 109-127
10. Literature and Culture	109-116
Main principle of construction of the literature — Main principle of	
construction of music and art — Principle of construction of kinship	
terminology and botany — "Paideuma" — Writing and literature	
11. Literature and Society	116-127
Economy and society — Society in literature — Structure of literature	
and structure of society — Function of the literature — Society and	
singer — Social history and history of literature	
 Chapter IV: Aspects of the Evolution of the Literature	 128-141
Fictitious changes in the Cuna p-theory — Cuna literature and	
concrete art — Evolution and energetic value of the works — Litera-	
ture writings — Developments of writing and literature — Develop-	
ments of ritual, writing and literature	
 Appendix: Systematic Catalogue of Selected Works of Cuna Literature	
.	142-154
 Bibliography	 155-164

INFORMATION ON BOOKS
published by
THE GOTHENBURG ETHNOGRAPHIC MUSEUM
(1970)

Etnologiska Studier

Issued at intervals as opportunity permits but numbered serially.

- 1, *Walter Kaudern*, Notes on Plaited Anklets in Central Celebes.
Stig Rydén, Skalpierung bei den Tobaindianern.
Henry Wassén, Notes on Southern Groups of Chocó Indians in Colombia.
182 pp. Göteborg, 1935. Kronor 15.—. *Out of print.*
- 2, *C. G. Santesson*, Pfeilgifte aus Burma und Yünnan.
C. G. Santesson, Pfeil- und Fischgift aus Kolumbien und Ekuador.
Henry Wassén, An Archaeological Study in the Western Colombian Cordillera.
Rafael Karsten, Arrow-Poisons and Narcotics in Western Amazonas.
Walter Kaudern, Notes on Plaited Anklets in Central Celebes 2.
83 pp. Göteborg, 1936. Kronor 3.50. *Out of print.*
- 3, *Stig Rydén*, Archaeological Researches in the Department of La Candelaria (Prov. Salta, Argentina).
C. G. Santesson and *Henry Wassén*, Some Observations on South American Arrow-Poisons and Narcotics. 358 pp. Göteborg, 1936. Kronor 12.—.
- 4, *C. G. Santesson*, Notiz über Piule, eine mexikanische Rauschdroge.
Henry Wassén, Some Cuna Indian Animal Stories, with Original Texts.
Stig Rydén, Primitive Types of the Peruvian Aryballos.
Stig Rydén, Brazilian Anchor-Axes.
Walter Kaudern, Anthropological Notes from Celebes. 138 pp. Göteborg, 1937.
Kronor 6.—. *Out of print.*
- 5, *R. J. Hunt*, Mataco-English and English-Mataco Dictionary (with Grammatical Notes).
Walter Kaudern, Two Fish-Traps from Celebes.
A. Métraux, Easter Island Sanctuaries, Analytic and Comparative Study.
137 pp. Göteborg, 1937. Kronor 9.—.

- 6, *Henry Wassén*, Original Documents from the Cuna Indians of San Blas, Panama, as Recorded by the Indians Guillermo Haya and Ruben Pérez Kantule.
C. G. Santesson, Noch eine mexikanische »Piule«-Droge, *Semina Rynchosiae phaseoloidis* DC. 184 pp. Göteborg, 1938. Kronor 10.—. *Out of print.*
- 7, *Edwin G. Burrows*, Western Polynesia, A Study in Cultural Differentiation.
Robert F. Heizer, The Plank Canoe of the Santa Barbara Region, California. 230 pp. Göteborg, 1938. Kronor 12.—. *Out of print.*
- 8, *Helen C. Palmatary*, Tapajó Pottery.
C. G. Santesson, Die Babongo-Zwerge und ihr Pfeilgift.
Walter Kaudern, C. G. Santesson Dead. 152 pp. Göteborg, 1939. Kronor 10.—.
- 9, *A. Métraux*, Myths and Tales of the Matakó Indians (The Gran Chaco, Argentina).
Jean Bassett Johnson, The Elements of Mazatec Witchcraft.
Walter Kaudern, Note on the Geographical Distribution of the Pygmies and their possible Affinities. 177 pp. Göteborg, 1939. Kronor 12.—. *Out of print.*
- 10, *Sture Lagercrantz*, Der Donnerkeil im Afrikanischen Volksglauben.
Walter Kaudern, The Passage of the Air through a Flute.
D. B. Stout, Additional Notes on the Occurrence of metal Nails in South America.
Ernst Manker, Eine degenerierte Lappische Zaubertrommel.
Henry Wassén, An Analogy between a South American and Oceanic Myth Motif and Negro Influence in Darien.
Henry Wassén, Anonymous Spanish Manuscript from 1739 on the Province Darien. A Contribution to the Colonial History and Ethnography of Panama and Colombia. 148 pp. Göteborg, 1940. Kronor 12.—. *Out of print.*
- 11, *Henry Wassén*, El antiguo ábaco peruano según el manuscrito de Guaman Poma.
Walter Kaudern, The Noble Families or Maradika of Koelawi, Central Celebes. 124 pp. Göteborg, 1940. Kronor 10.—. *Out of print.*
- 12—13, *Sture Lagercrantz*, Über willkommene und unwillkommene Zwillinge in Afrika.
Henry Wassén, A forged Maya Codex on Parchment, A Warning.
Henry Wassén, *Walter Kaudern* in Memoriam. 330 pp. Göteborg, 1942. Kronor 15.—. *Out of print.*
- 14, *Nils M. Holmer*, Critical and Comparative Grammar of the Cuna Language. 219 pp. Göteborg, 1947. Kronor 10.—. *Out of print.*
- 15, *Fred McKim*, San Blas, An Account of the Cuna Indians of Panama.
Fred McKim, The Forbidden Land, Reconnaissance of Upper Bayano River, R. P. Two Posthumous Works edited by *Henry Wassén*. 186 pp. Göteborg, 1947. Kronor 12.—. *Out of print.*

- 16, *Henry Wassén*, Contributions to Cuna Ethnography.
Henry Wassén, Some Archaeological Observations from Boquete, Chiriqui, Panama.
189 pp. Göteborg, 1949. Kronor 15.—. *Out of print.*
- 17, *Karl Gustav Izikowitz*, Lamet, Hill Peasants of French Indochina. 376 pp. Göteborg,
1951. Kronor 20.—. *Out of print.*
- 18, *Nils M. Holmer*, Cuna Chrestomathy. 192 pp. Göteborg, 1951. Kronor 15.—.
Out of print.
- 19, *Nils M. Holmer*, Ethno-Linguistic Cuna Dictionary. 194 pp. Göteborg, 1952.
Kronor 18.—.
- 20, *Nils M. Holmer*, Inatoippipiler or The Adventures of Three Cuna Boys.
S. Henry Wassén, New Cuna Myths, According to Guillermo Hayans. 103 pp.
Göteborg, 1952. Kronor 14.—. *Out of print.*
- 21, *Nils M. Holmer* and *S. Henry Wassén*, The Complete Mu-Igala in Picture Writing.
A Native Record of a Cuna Indian Medicine Song. Revised edition of the authors'
Mu-Igala or the Way of Muu with translation and comments. 158 pp. Göteborg,
1953. Kronor 18.—. *Out of print.*
- 22, *Stig Rydén*, The Erland Nordenskiöld Archaeological Collection from the Mizque
Valley, Bolivia. 143 pp. Göteborg, 1956. Kronor 22.—.
- 23, *Nils M. Holmer* and *S. Henry Wassén*, Nia-Ikala, Canto mágico para curar la
locura. Texto en lengua cuna, anotado por el indio Guillermo Hayans con
traducción española y comentarios. 138 pp. Göteborg, 1958. Kronor 22.—.
- 24, *Henny Harald Hansen*, Some Costumes of Highland Burma at the Ethnographical
Museum of Gothenburg. 81 pp. Göteborg, 1960. Kronor 10.—.
- 25, *Karl Erik Larsson*, Fijian Studies. 147 pp. Göteborg, 1960. Kronor 24.—.
- 26, Estudios Chocóes. I, *S. Henry Wassén*, Etnohistoria chocoana y cinco cuentos
waunana apuntados en 1955, pp. 1-78; II, *Nils M. Holmer*, Gramática comparada
de un dialecto del Chocó, pp. 79-248. Göteborg, 1963. Kronor 24.—.
- 27, *Nils M. Holmer* and *S. Henry Wassén*, Dos cantos shamanísticos de los Indios
Cunas. 1. *Serkan-Ikala*, La canción de los muertos. 2. *Tisla-Ikala*, Canción
Iniciatoria. Textos en lengua cuna, anotados por el indio Guillermo Hayans con
traducción española y comentarios. 151 pp. Göteborg, 1963. Kronor 22.—.
- 28, *S. Henry Wassén*, The Use of Some Specific Kinds of South American Indian
Snuff and Related Paraphernalia, pp. 1-116, with 1 Map and 58 Figures in the
Text. Appendix, *Georg J. Seitz*, Einige Bemerkungen zur Anwendung und
Wirkungsweise des *Epena*-Schnupfpulvers der Waika-Indianer, pp. 117-132,
7 Figures in the Text. Göteborg, 1965. Kronor 30:—.

- 29, *Karl Eric Knutsson*, Authority and Change. A Study of the Kallu Institution among the Macha Galla of Ethiopia. 239 pp. Göteborg, 1967. Kronor 30.—.
- 30, *Fritz W. Kramer*, Literature among the Cuna Indians. 166 pp. Göteborg, 1970. Kronor 35.—.

Other works

- Sven Lovén*, Origins of the Tainan Culture, West Indies. 697 pp. Göteborg, 1935. Kronor 50.—.
- Erland Nordenskiöld*, «Comparative Ethnographical Studies». Vol. 10: An Historical and Ethnographical Survey of the Cuna Indians by Erland Nordenskiöld in collaboration with the Cuna Indian Ruben Pérez Kantule. Edited by Henry Wassén. 686 pp. Göteborg, 1938. Kronor 50.—.
- Etnografiska Museet, Göteborg, ÅRSTRYCK 1957–1958 (Annual Reports for 1957 and 1958 and Attached Papers). 85 pp. Göteborg, 1960. Kronor 10.—. *Out of print*.
- Etnografiska Museet, Göteborg, ÅRSTRYCK 1959–1962 (Annual Reports for 1959, 1960, 1961 and 1962 and Attached Paper: *S. Henry Wassén*, Från Mexiko och Centralamerika 1962 samt *Sr. Hayans resa till Río Caimán i Colombia*). 96 pp. Göteborg, 1963. Kronor 10.—.
- Etnografiska Museet, Göteborg, ÅRSTRYCK 1963–1966. (Annual Reports for 1963 through 1966, pp. 1–96 and *S. Henry Wassén*, Om några indianska droger och speciellt om snus samt tillbehör, pp. 97–140.) Göteborg, 1967. Kronor 20.—.
- Etnografiska Museet, Göteborg, ÅRSTRYCK 1967–1968. (Annual Reports for 1967 and 1968, pp. 1–62. Pp. 63–82, *Bente Bittmann Simons*, The Map of Tepecoacuilco: A Pictorial Manuscript from the State of Guerrero, Mexico. Pp. 83–95: *Lautaro Núñez A.*: Informe arqueológico sobre una muestra de posible narcótico, del sitio Patillos-1 (Prov. de Tarapaca, Norte de Chile). Con notas adicionales de *S. Henry Wassén* y *Björn Lünning*. Göteborg, 1969. Kronor 20.—.

Price in Swedish Kronor. Orders to Göteborgs Etnografiska Museum, N. Hamngatan 12, S-411 14 Göteborg, Sweden, or to book dealers.

The books sold by the Museum may also be obtained in exchange of other periodicals and series in anthropology.

GN2
.G7
no. 30

701460

NOV 10 1970

NOV 1 1910
MIDDLETOWN, PA.

PENN STATE UNIVERSITY LIBRARIES



A000069498299